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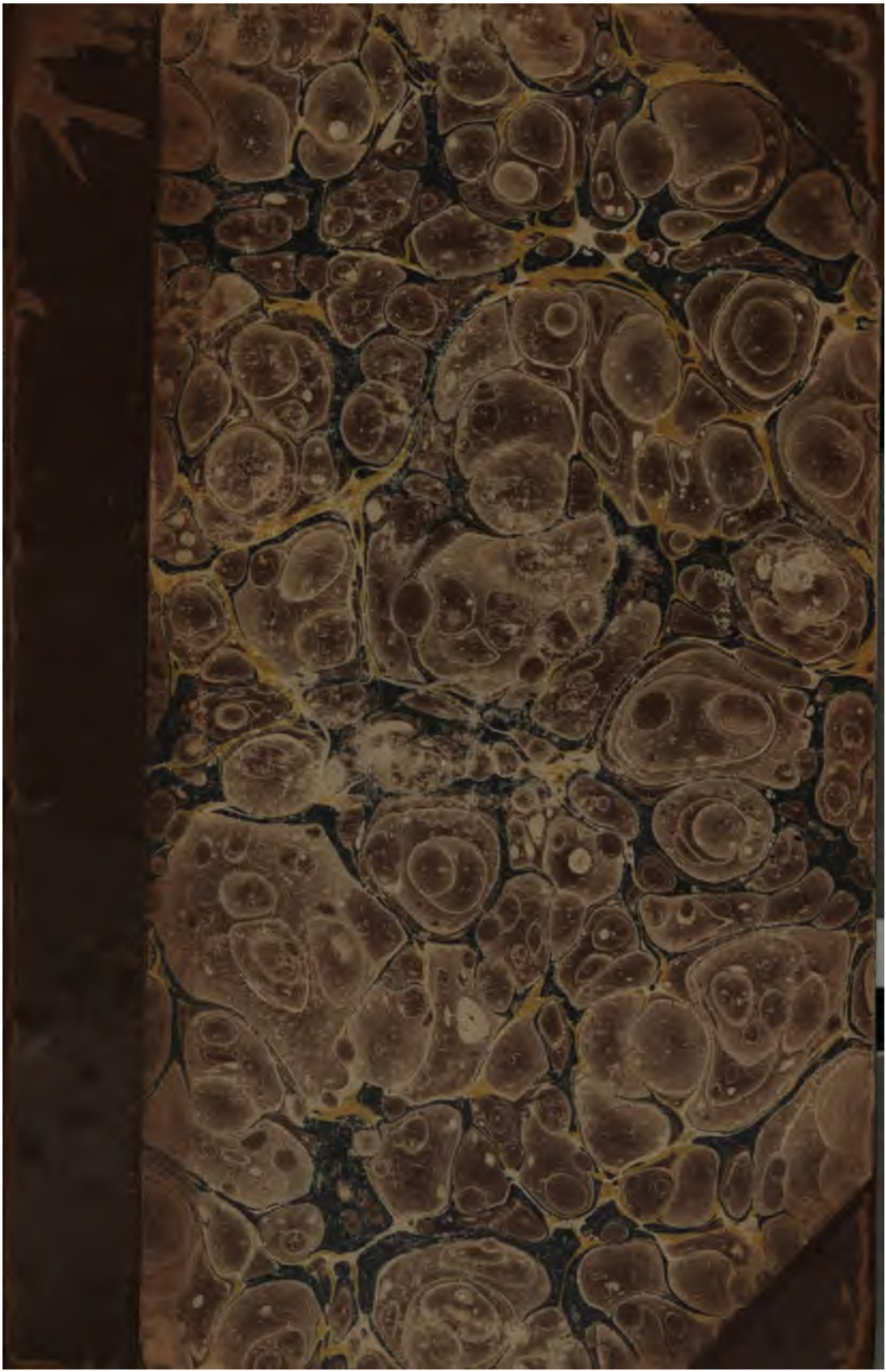
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A FURTHER EXAMINATION

OF THE PRINCIPLES OF

THE TREATMENT OF GOUT,

&c. &c.

A

FURTHER EXAMINATION

OF THE PRINCIPLES OF

THE TREATMENT OF GOUT;

WITH

OBSERVATIONS

ON

THE USE AND ABUSE OF COLCHICUM:

BY

SIR CHARLES SCUDAMORE, M.D. F.R.S.

ETC. ETC.

THE SECOND EDITION,

CONSIDERABLY ALTERED AND ENLARGED.

Sed cura, obsecro, ut valeas, eamque, quam ad omnes res adhibes, inprimis ad convalescendum adhibe prudentiam.—CICERO MEDICUS.

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PREFACE.

EIGHT years have elapsed since I published my opinions on the subjects principally treated of in this volume. That edition of the work was soon disposed of; and this circumstance furnished a sufficient proof of the interest of the inquiry. As such interest does not appear to me to be weakened at the present moment, I take occasion to offer the results of my further observation and experience.

The chief object of the following pages is to enquire into the real merits of the colchicum autumnale as a remedy in gout. Too strong a warning cannot, in my opinion, be given against the employment of the gout nostrums, or against the empirical use of the strong preparations of colchicum.

I do not fear that any inconsistency will be attributed to me, because I censure the ad-

ministration of a medicine on one principle, or in one mode, and recommend its employment on another principle, or in another mode, and under certain limitations. Most important is the difference of effect produced by various medicines, according to the particular preparation, and the dose. Can remedies be scarcely more opposite than mercury administered as a small dose of the pilula hydrargyri, or as a large dose of calomel, or in the form of corrosive sublimate? Even the prussic acid, and arsenic, in certain cases, are remedial, and perfectly safe in minute doses, but would be highly improper in other cases, and become dangerous in doses of magnitude. The same representation may be drawn of all our very active medicines.

Many valuable remedies have been brought into disrepute, either from misemployment, or from an exaggeration of their curative powers; or from some misrepresentation. It is, I conceive, no unworthy labor to study the true boundaries of our art; and, in regard to any particular medicine, to investigate its best mode of action; to ascertain the changes which

may be given to its remedial qualities by pharmaceutical preparation; to determine its most useful doses; and its most advantageous combination with other medicines.

That the colchicum autumnale is a very valuable medicine, must, I am sure, be admitted by all those who have had sufficient opportunity of putting its merits to the test.

The idiosyncracy of some individuals, in regard to its action, is found either to require its very cautious employment, or may possibly forbid its use altogether.

Should such a difficulty present itself, it is satisfactory to know that, in the treatment of gout, we may, with confidence as to final success, have recourse to other medicines of safe operation and well-known character.

Our resources are not limited to the use of the colchicum autumnale; and indeed, as I hope to shew, in the prosecution of my argument, I consider that the *radical* treatment of the disease is wholly to be found in means of a different nature.

Wimpole Street, January 10th, 1833.

A

FURTHER EXAMINATION

OF THE PRINCIPLES OF

THE TREATMENT OF GOUT;

WITH OBSERVATIONS ON THE

USE AND ABUSE OF COLCHICUM.

INTRODUCTORY OBSERVATIONS.

PUBLIC and even professional opinion seems to be yet much unsettled regarding the proper treatment of gout. The majority without doubt adhere to the employment of colchicum in some of its active forms, and for the most part, as I conceive, upon wrong principles, and in a manner not only often productive of serious injury, but also very commonly leading to so much disappointment as to shake the confidence of many persons in the propriety of using any extraordinary interference with the paroxysm.

It appears to me therefore a subject of sufficient interest and importance, to attempt a further examination of the best principles of treatment; and of the merits of the colchicum autumnale as a remedy in this disease.

Having published an extended Treatise on Gout, the fourth edition of which is not yet exhausted, it would be foreign to my present purpose to enter into minute details; and I shall here offer only a general outline of the history of the disease.

We cannot too steadily keep in view, that the peculiar external appearance of inflammation which we denominate the gout, is the least part of the disease, and is to be regarded as the sure sign of some error in the constitution, and which is the real disease to be principally treated; the local suffering being the effect of a cause existing in the system. This fundamental position being admitted, our next inquiry is, what is the nature of the constitutional cause which gives rise to this peculiar inflammation in the extremities? The knowledge of the proximate cause, or that one essential and indispensable state of the system which is the invariable antecedent of the disease, is an interesting problem which baffles our most acute research. It is a difficulty, however, not exclusively belonging to gout. I do not affirm that it is impossible for the art of chemistry to detect some specific difference in the blood during a paroxysm of gout, having some relation of cause and effect; but I do not expect that any such investigation can be perfected. This difficulty is the less to be regretted; for I

conceive that we have quite sufficient guidance to the nature and treatment of the disease in its obvious characters. The inflammation of St. Anthony's fire is of a peculiar or specific kind; but we are not able to show that, during its existence, the blood possesses any essential chemical difference from that which belongs to it during gouty inflammation, or even common inflammation. Even in those humoral diseases in which the peculiar or specific fever of the system arises from the admixture of a virus with the blood, as, for example, the small pox and measles, we do not institute an examination into the chemical nature of the blood, nor attempt a chemical method of treatment.

We may rest satisfied with the fact, that some individuals possess in their constitution an hereditary disposition to gout, which comes into action in proportion as it is called forth by the influence of the predisposing and the exciting causes; and, that other individuals acquire this disposition, wholly by means of improper habits of living acting upon that peculiarity of constitution, which involves the inscrutable question of proximate cause.

We see every day some striking example of the absence of all appearance of disposition to gout, in persons who do not avoid the predisposing and exciting causes, but, on the contrary, commit every kind of irregularity and

excess in their habits of living. Some evil consequences will of course ensue; but, in such particular instances, it would seem that the gout cannot be produced. Very frequently, however, the gout is wholly acquired, there being no trace of its existence in any preceding generation, by those persons who use animal food to excess, drink freely of wine, or indulge in the use of strong malt liquor together with spirits, and commit other irregularities.

In answer to the immediate and interesting question, what is gout, and in what essential particular does it differ from other diseases? I shall content myself on the present occasion with a few remarks, having in my Treatise entered into this question at length.

It commonly happens that in a first fit of the gout, a plethoric state of vessels, either absolute or relative, appears the predominant, if not the only error which can be detected in the state of the constitution. The local inflammation, usually attacking the ball of the great toe, appears to be an effort of nature to relieve the fulness of habit, partly in the way of the afflux of blood to the extremity, and partly in the way of counter-irritation.

In the returns of the disease, the symptoms of constitutional error become more remarkable, and usually more parts than one externally become affected. In a general statement of the

fact, it may be said that the plethora which exists is of a partial kind. That determination of blood to the extremities, which, in its peculiar actions, exhibits the phenomena of gout, becomes more and more obviously connected with congestion in the whole system of the vena portarum; with a vitiated secretion of the bile, a faulty condition of the bowels, and altered function of the kidneys, and of the skin. In the further progress of time, the nervous system falls more sensitively under the influence of the disease, and its occurrence is more frequent and more readily induced.

The stomach is truly the medium through which the gout is created. Excess of ingesta, beyond the powers of healthy assimilation and the supply of blood demanded for the useful purposes of the body, is the material foundation of the disease. There is an excess of animalization in the system. In the first visitation of gout, the stomach, although the first parent of the disease, usually is the organ least deviating from its ordinary and healthy state. The appetite very commonly continues natural, unless indeed the symptoms are sufficiently severe to produce high sympathetic fever, when thirst and loss of appetite would naturally follow. In the course of time, if improper habits are continued, dyspepsia or true indigestion is produced.

It is a curious consideration that, when the disposition to gout is fully established in the constitution, the paroxysm often takes the patient by complete surprise, and finds him in the seeming enjoyment of health, or, more correctly speaking, possessing comfortable feelings and those good looks which give the portrait of health, although, most assuredly, the constitution is not really in a healthy state. For example, the day shall be passed with all the apparent evidence of health, which I have just mentioned, and on the same night a paroxysm begins, which, if left to its own course, might last for two or three months, breaking down the constitution, and leaving the limbs crippled, the whole frame weakened, and the nervous system greatly exhausted.

On investigating the history of such a case, we usually find that the patient is made aware of having experienced a gradual enlargement of the abdomen, joined with various indications of fulness of the habit. The veins of the extremities, especially of the lower, are more distended with blood than is natural. The medical observer, upon a closer investigation, discovers a want of due softness and pliancy in the right hypochondrium, where the principal part of the liver is situated; the whole of the abdomen is unduly distended: the bulk of the body generally may be increased, from vascular fulness and

from deposition of fat; but the muscles do not possess a healthy firmness.

During the continuance of the paroxysm, the various secretions are changed from their natural state; the intestinal evacuations are darker than usual, and have a morbid degree of fœtor, indicating that the bile has acquired an acrimonious and irritating quality. That the process of assimilation, or the conversion of chyle into blood, is disturbed from its healthy course, in a decided paroxysm of gout, is most commonly proved by the condition of the urine, which has a much higher specific gravity than is natural, is strongly animalized, and deposits dense sediments. Such sediments consist of the usual salts in excess, together with animal matter, which the kidneys, apparently in the office of salutary aid to the constitution, secrete from the blood. The functions of the skin, also, are altered more or less from the natural state; the perspiration is more strongly acid than in health, and, in some persons, during the presence of gout, it possesses a peculiar, offensive odor.

For the reasons which I have stated, I consider that the gout, which appears to the eye as an external disease, is most essentially depending on that species of repletion which belongs to the vessels of the abdominal viscera, and chiefly of the liver. In its progress, it manifests this connection more strongly; and I do affirm

that in every long-established case of gout the functions of the liver are more or less unhealthy, in combination with a disordered condition of the intestinal canal, with evidences of error in the secretions derived from the kidneys and from the skin; and, also, in proportion as the tyranny of the disease becomes established, the nervous system partakes largely in the derangement. The stomach itself, which at the earliest periods of gout is often little, or not at all, affected, now becomes disordered, and serious indigestion commonly prevails.

Let us now take a short review of the theory and practice, which have prevailed in ancient and modern medicine up to the present time. To include the opinions of all who have written on gout, from the earliest age of medicine, would alone require a large volume, and would, I believe, embody much more of curious than of useful information. The Greek Physicians appear to have considered the gout and rheumatism as one common disease, and to have denominated the varieties of either disease according to situation; as podagra in the feet; chiragra in the hands; pechyagra in the elbow; gonagra in the knee; dentagra in the teeth; cleisagra in the articulations of the clavicles; omagra in the articulations of the humerus; rachisagra in the spine of the back; and tenontagra in the large tendons. These terms also

descended to the Latins, and were in the same manner indiscriminately applied to gout and rheumatism. In the study, therefore, of the practice of the ancient physicians, we are led to the conclusion that the two diseases, gout and rheumatism, were not differently treated upon principle, but that for either disease remedies were applied chiefly according to the doctrines of the humoral pathology; and of necessity must have been varied accordingly as the symptoms should prove acute or chronic.

I have carefully studied the ancient authors on the subject of gout, from Hippocrates downwards, and have found that the only point on which there has been an uniformity of opinion, is, the necessity of great temperance in living, and care in general regimen, as the probable means of preventing the returns of the disease, or of mitigating its violence. Much later than the time of Sydenham, the treatment of gout has been laid down by the writers of different ages and countries on the basis of the humoral doctrines. The foundation of the notion of the humoral nature of gout is shewn by the etymology of this term: *gutta*, a drop; signifying that the disease was caused by the dropping of some humor into the joints. The same term has been adopted in other languages; as in the French, la goutte; the Italian, gotta; Spanish, gôta; and so on in other countries. Without

doubt, the idea of a specific gouty humor floating in the circulating blood has owed much of its support to the formation of chalk stones (as the concretions are improperly called) in the constitutions of a few individuals; but, as this is an exception rather than a rule, if the inquiry be extended to the large class of gouty invalids, it cannot serve to explain sufficiently the proximate cause of the disease. Also, those products which take place, I repeat, only with the small proportion of gouty persons, is an effect and not a cause of the gouty action.

We may consider it certain that the gout was one of the earliest diseases of man on his partaking the luxuries of civilized life; and that rheumatism, a disease commonly confounded with gout, till the dissertation of Ballonius in 1642, was, in all probability, an affliction of the human frame even with the rude tenant of the forest, before civilization began.

We find that, in the earlier ages of physic, much greater freedom was used in the treatment of gout than we might imagine; and numerous are the remedies recommended by Hippocrates, *Galen**, and every succeeding writer. The humoral pathologists in general ascribed the gout to the corruption of the blood by bile and phlegm, or to the mixed influence of yellow bile, phlegm,

* Born A.D. 131, died A.D. 201.

blood, and black bile. Many of their remedies were prescribed with reference to the supposed condition of the humors; but many, also, were such as are in use with us at the present day.

It was an aphorism of *Hippocrates** that concocted and not crude humors are to be evacuated; and, with this view, he directed that the gouty patient should be purged, and drink whey and asses' milk. Yet, to shew that he did not dread an interruption to Nature in her functions in this disorder, he recommended the affusion of cold water to the parts affected, observing that the pain would be relieved by whatever induced a moderate torpor of the limb. For sciatica especially, which by the ancients was considered as a species of gout, he prescribed the burning of the part with raw flax.

Celsus† recommended bleeding on the first occurrence of gout, observing that some by this method had escaped gout for a year, some even for life. Those especially became exempt from its return who nourished themselves for a time with asses' milk. He prescribed emetics, sudorifics, and gentle aperients. As local treatment, cold or warm applications, according to the

* Born about 350 years before Christ, and said to have lived to upwards of 100 years of age.

† Born in the latter end of the reign of Augustus Cæsar, a few years before Christ.

nature of the gout, whether with or without inflammation; as cold water immersion for the removal of the heat; but not without caution: "Si vero tumor calorque est, utilioraque sunt refrigerantia, rectique in aqua quam frigidissima articuli continentur, sed neque quotidie, neque diu fiat, ne nervi indurescant." For pain without inflammation, poppy fomentation; the poppies being boiled in wine and mixed with rose cerate; poultices, and other applications. He gave due cautions for a careful mode of life, and that the patient should guard against corpulence.

*Aretæus** gives a very energetic description of the intense sufferings of the gout; which he says could not be exceeded if the patient were to be pierced with a sharp instrument, or bound with chains, or severely bruised, or even burnt with fire. He observes that the true cause of the disease was known only to the gods! For pain not attended with evident inflammation, he directs fresh shorn wool, considering this as cold gout, and that the disease should be brought to the surface; the parts also to be sponged with oil of roses and wine, and sometimes with diluted wine. For the hot or inflammatory gout,

* A native of Cappadocia, and was supposed to have flourished in the reign of the Emperor Trajan, about the year A.D. 112.

poultices made with cooling herbs and bread, as sage, cinquefoil, mallow, &c. and also poultices with fruits, as citron, figs, and almonds, with bread or barley flour. He praises the effects of white hellebore* in the complaints of the joints (arthritis), by which we may understand gout and rheumatism indiscriminately; and advises care in living, anointing, and cold sea-bathing. He offers some consolation for gouty sufferers, by narrating that one individual, who had been subject to gout, so far recovered that he was successful in the race at the Olympic Games.

Alexander Trallianus† wrote at much length on the gout, and, together with several prescriptions of a superstitious kind, recommended some efficient modes of treatment, intended as applicable to the particular kind of humor which he considered to be the existing cause of the disease: as bleeding for the sanguineous, and in each species a frequent repetition of such cathartics as should be accommodated to the complaint: abstinence from such food and drink as had a tendency to generate these humors during the fits of the gout, and occasionally in the intervals of the disorder. Amongst the formulas of this author, we find a combina-

* Και γαρ τοισι ποδαγρικοισι ελλεβορος ΤΟ ΜΕΤΑ ΑΚΟΣ.

† Flourished in the Sixth Century.

tion of aloes, scammony, elaterium, and hermodactyl (colchicum); all powerful ingredients, and such as we should not think it prudent to prescribe together; antidotes, so called, without number, and extremely complicated; poultices and other applications: proving, that in his time there was no apprehension of treating the gout.

*Sydenham**, who has been dignified with the title of the English Hippocrates, considered that the cure of the gout should be attempted as far as the age and strength of the patient would permit. Acknowledging his ignorance of the radical cure of the disorder, he indulged the belief that, at some time or other, an effectual remedy would be discovered. Entirely influenced by the doctrines of the humoral pathology, he admitted the occasional apparent indications for the use of the lancet, of purgatives, and of diuretics; yet thought that we should be extremely careful not to encroach on the prerogative of Nature, but suffer her to eliminate the peccant matter in her own way by insensible perspiration. He allowed a dose of laudanum at night for the relief of violent pain. He condemned the use of purgative medicines, under an idea that the morbific matter, which, he says, should always be translated

* Born 1624, died 1689.

to the joints, would be invited back into the blood. In this opinion, and in what he says of bleeding and emetics, we see exemplified the danger of a theory, which, in this instance, so strongly served to blind the judgment of a good physician. After his first publication on gout, he allowed the use of a gentle aperient in the fit, to be followed by an anodyne at night. He had seen occasional benefit from the use of a poultice made with white bread and saffron boiled in milk, with the addition of a small quantity of oil of roses. He mentions the application of moxa; the part affected to be slightly burned with it; and adverts to the similar practice of Hippocrates with raw flax. For the prevention of the disease, he desired the utmost temperance and regularity in diet; one dish only at a meal, wine merely as a medicine, horse exercise, country air, the use of a decoction of sarsaparilla, sassafras, china root, hartshorn shavings, liquorice, and aniseed, as a diet drink throughout the year. His ill success, in his own case, was a strong commentary on the unfitness of his doctrines. He lived and died a martyr to the gout.

*Willis** considered the gout to arise from a mixture of humors rather than any one singly, and mentions, as a cause, in addition to

* Born 1646, died 1675.

the usual humours, acid refuse of the nervous humor. His remedies were numerous and very active; for we find, in the list, bleeding, emetics, the strongest purgatives, as elaterium, hermodactyl, calomel, scammony, and aloes; opium for the relief of pain; in addition to local treatment by means of lotions, fomentations, poultices, and plasters. His very active and certainly violent method of practice is strongly contrasted by the timid forbearance of Sydenham.

*Musgrave** attributed the gout to a specific miasm in the blood, for the most part hereditary. His divisions and subdivisions of the disease were very artificial, and his pathology was altogether humoral. For the inflammatory gout, he approved of leeches, and a blister applied either to the swollen part or near it, and also of cupping and scarification. He protested against cold water and various other local treatment in occasional use at that day, but did not object to wool, and a poultice made with soft soap and yolks of eggs. It would be tedious to follow this author into the varieties of his treatment, to be adapted to the various accidental symptoms which might be associated with gout, and which he created into species and varieties.

Cheyne†, a distinguished physician in his time, after being himself guilty of much intem-

* Born 1647, died 1721. † Born 1670, died 1742.

perance, and suffering from gout as one of its consequences, wrote a strong philippic against the luxuries of the table, and declared that intemperance was the fruitful source of disease and death with the English. He did not allow of much interference with the fit, but approved of occasional cathartics in the interval, and especially recommended the cold bath, the daily use of sulphur, and a strict regimen.

*Hoffman**, in his Essay de Dolore Podagrico et Arthritico, gave a clear account of the symptoms of the disease, adhering, however, very strictly to the doctrines of the humoral pathology. He advised the use of aperients in the paroxysm, as infusion of rhubarb and manna with cream of tartar; sudorifics consisting of the anodine æther, which was called by his name (spiritus ætheris sulphuricus compositus), antimony, and nitre; bleeding for those of the sanguineous temperament, and especially if there had been a suppression of an accustomed hæmorrhoidal discharge, or of the catamenia. He gave a caution against local applications, but approved of a poultice prepared with bread and milk, yolk of egg, elder flowers, and saffron. To prevent the returns of gout, he advised that those of full habit, and living freely, should lose blood occasionally; and speaks of the great

* Born A.D. 1660, died 1742.

benefit which he had himself derived from losing blood from the foot, by means of cupping*, once in three months; and he expatiates on the advantage of drawing superfluous and stagnant blood from this extreme part. He recommended that emetics† and infusions of a laxative kind, joined with strengthening medicines, should be used in spring and autumn. Many of his observations on diet were judicious, as he wisely considered that it should be adapted to the age and constitution, and former habits of living; so that the severity of a milk diet would only be applicable to a few persons, of vigorous constitution, and of the sanguineous temperament.

There are cases of chronic gouty inflammation of the foot, in which I should recommend local cupping; but I cannot approve of this periodical treatment, which was founded on false principles of the humoral pathology.

* This valuable method of treatment may be traced back as far as Hippocrates, who discourses respecting it, in his Chapter de Medico.

† Vomits were recommended by Hippocrates as an excellent preservative of health, and as a preventive of diseases. For this purpose, he prescribed a decoction of hyssop, or of lentils, with a little salt and vinegar; honey-water and vinegar, and such like remedies, to provoke a gentle vomiting. Those who were strong were to use vomits fasting; lean persons, and those who were delicate and weakly, after dinner or supper.

*Boerhaave** ascribed the gout to indulgence in rich food and strong liquors, and often to a sudden check of perspiration from the feet. He attached so great an importance to the functions of the skin, that he declared he never knew the gout to attack any one who continued to perspire. He advised great abstinence as the chief source to be depended upon for a cure, and sometimes directed arthritic subjects to be bled a month or two before the expected fit, and also the occasional use of cathartics.

Baglivi†, who published his valuable works about the end of the seventeenth century, notwithstanding his Essay on the Moving Fibre, and his ingenious Enquiry into the Diseases of the Solids and the Influence of Nervous Sympathy, spoke of a morbific matter in the blood as the essential cause of the disease. He gave an animated description of the sufferings of the paroxysm, which he said were beyond the power of the stoic himself to endure. He considered that the disease was the offspring of sloth and intemperance, and that its natural cure consisted in exercise, temperance, and sobriety. His quotation from Plutarch is rather amusing—that such gouty persons as could not take any other kind of exercise, should use the voice in reading aloud, or in talking with friends, or in singing. He gave strong injunc-

* Born A.D. 1668, died 1738. †Born A.D. 1669, died 1707.

tions against either internal or external treatment in the case of œdematous gouty swelling, apprehending the secession of the matter to the internal parts. He advised a strict attention to diet, and that issues should be made near the affected joints.

*Mead** considered the gout to be the offspring of luxury and intemperance, and an effort of nature to throw off an intolerable load from the general habit, depositing it about the joints. He advised bleeding in a severe fit, especially if attended with delirium or difficulty of breathing, and thought it a more useful evacuant than cathartics: in retroceding gout, bleeding, or warm cathartics, cordials, and blisters to the extremities. He thought that gout was curable in those who were not advanced in years, and whose strength was not broken down by the disease; by means of a milk and vegetable diet for the most part, but in general allowing a small quantity of tender animal food once a day, with water as the beverage, joining the observance of constant moderate exercise.

Van Swieten† disapproved of cathartics and emetics, and preferred sudorifics. He also condemned bleeding, considering that all active evacuants would fail to reach the seat and the material cause of the disease. In the event of

* Born A.D. 1673, died 1754.

† Born A.D. 1700, died 1772.

metastasis, he admitted bleeding and other evacuants, merely as a choice of evils. He attached due importance to abstinence, and related narratives of the exemption from the returns of gout in those who had fallen from prosperity into great adversity.

*Cadogan** recommended a mild laxative in the fit, and a large dose if the symptoms were violent. He thought bleeding proper in young and vigorous subjects. He advised abstinence, and in many instances a milk diet.

Heberden†, in very happy language, satirized the opinions of the day regarding the supposed virtues of the gout, observing "that some people, on the attack of the disorder, fondly congratulate themselves on the completion of their wishes; and during the honey-moon of the first fit, dreaming of nothing but perfect health and happiness, persuade themselves that they are much the better for it, and also that when the functions of life begin to fail, they flatter themselves they have a lurking gout in their constitution, and that a proper fit of the disorder would restore them to their pristine vigor; but however novices in the gout may flatter themselves, those who have labored under it many years tell another tale." After

* He died at an advanced age, A.D. 1797.

† Born A.D. 1710, died 1801.

observing upon the value of abstinence from wine and spirituous liquors, as a means of deliverance from the returns of the disease, he contends "that the gout should not be considered as a reproach to medical practitioners, till they are permitted to attempt a cure of that disease, nor till they can find gouty patients who will follow their advice."

The doctrines of Sydenham had undoubtedly an extensive influence in deterring gouty persons from using any active interference with the fit; and this must have been considerably strengthened and confirmed by the dictum of the eminent Professor in the Chair of Edinburgh, the late Dr. Cullen, who delivered the following aphorism: "The common practice of committing the person to patience and flannel alone, is established on the best foundation." Such, for the most part, was the general apathy in regard to the gout; which was really a neglected disease—neglected even by medical men, and, as Heberden had observed, "rather courted than dreaded by patients, until they had experienced its torments." I well remember the period when some of my friends consulted the most eminent physicians of the day, for the relief of their sufferings in the fit, with complete disappointment; and I knew a most distinguished physician, who declined continuing his attendance on a patient suffering severely from a fit;

declaring that "he could do nothing for the gout!" This total indifference was not, however, to remain.

*Darwin** advised "that in young, strong patients the gout should be cured by venesection, cathartics, and diluents, with poultices externally;" but, he observes, "it has a natural crisis by producing calcareous matter in the inflamed membrane, and therefore in old, enfeebled people it is safer to wait for this crisis, attending to the natural evacuations, and to the degree of fever; and in young ones, when it is not attended with much fever, it is customary and popular not to bleed, but only to keep the body open with aloes, to give gentle sudorifics, as neutral salts, and to give the bark at the decline of the fit, which is particularly useful when the patient is much debilitated. He desired a gradual diminution of all alcoholic liquors, or a total abstinence from them, as indispensably necessary towards a cure, or an alleviation of the disease. This ingenious Physician erred in stating the formation of the substance commonly called chalk stones as a common termination of gouty inflammation, and equally so in calling it calcareous. The termination by suppuration rarely happens in gout; but when this has occurred under my ob-

* Born A.D. 1731, died 1802.

servation, I have invariably seen that the purulent discharge has been abundantly mixed with the super-urate of soda, which, when dried, receives the familiar name of *chalk*; probably from its allowing of making a mark on wood as with ordinary chalk*.

Dr. Kinglake published a Dissertation on the Gout in the year 1804, in which he endeavoured to establish his opinion that the gout differs in no essential circumstance from common inflammation; that, in his own words, "it is solely a disease of temperature, a painful affection resulting from a morbid excess of heat in the ligamentous and tendinous structures," for which, his sovereign treatment was the free and assiduous application of cold water to the affected part. More distinctly to explain his views, I shall quote the following passage:

"If sudorific and opiate medicines succeed in any degree, it is by refrigerating and abating the vehemence of inflammatory action on the affected part. If purgatives and blood-letting avail, it is in the same manner. Abstinence is also beneficial on a similar principle; nor can the ultimate effect of stimulant applications to the inflamed part afford relief but by exhausting

* A case is related in the first volume of the Medical Communications, of a gouty man who had every joint resembling a lump of chalk; and who was said to score up the game with his knuckles, when he played at cards.

the natural energy of vital action, and thus indirectly inducing the cooling languor of deficient excitement. In none of these instances is benefit either promptly, certainly, or adequately obtained. The effect of the means is not sufficiently concentrated on the aggrieved part fully to allay inflammatory heat, which can only be appropriately and effectually accomplished by the topical application of cold water, incessantly continued until all sense of *painful heat* be subdued. Other remedies may be prepared and tried, but can only be *indirectly* operative on the principle of temperature, which *directly* ensures equal safety and efficacy to this simple agent."

The idea of removing the painful inflammation of gout on such simple and easy terms as the extinction of the morbid heat by the application of cold water, was sufficiently plausible and seductive for the imagination of many persons; and proselytes to the doctrine were not wanting: not that Dr. Kinglake was original in the recommendation of the refrigerant treatment by means of cold water, as we find it recommended in the writings of Hippocrates and many succeeding writers; but no one ever directed its use in so systematic a manner—I must add, with the same dangerous boldness —nor, like him, endeavoured to shew the disease to be merely a local inflammation. Some individuals, who had gout in its most pure form,

and whose constitutions were firm and unbroken, adopted the treatment with success; and a few physicians spoke favourably of the practice in their own persons.

Ere long, however, cases of danger and some few of death occurred as the consequence of this rash method of practice; and the public mind became alarmed. The practice, I believe, has long since fallen into entire disrepute.

Next, I believe, in the order of time, but much more remarkably in point of attraction and popularity, the introduction of the eau medicinale took place; an extraordinary æra in the treatment of gout. The powers of this medicine, in quickly relieving the severest symptoms of the fit, were in many instances so remarkable as to appear rather like the force of magic, than the action of an ordinary remedy. Dr. Jones, who published an account of the medicine in 1810, stated that it had been discovered about forty years previously by M. Husson, a military officer in the service of the King of France. "After some experience of its powers, he was persuaded to publish it, and it was accordingly announced to the world as a sovereign remedy for almost every disorder incident to the human body." Accident led to its being used as a remedy for gout. It found enemies as well as friends, was decried as a poison, and at length so loud a

clamor was raised against it, that the sale of it was suppressed at Paris, in 1778, by an order from the police. The prohibition was, however, removed on the fifth day. Mr. Crawford is the first English individual who took the medicine, and this was not till the year 1808. From this period the remedy first grew into notice, and as rapidly became universally employed by gouty persons in this country. Never perhaps did a medicine enjoy such extreme popularity for a considerable time as this; doomed, however, at no long interval to fall into an equal degree of odium. Of its truly injurious character I have stated many striking instances in my general Treatise, and shall not here enter into these details, the more especially as a warning is no longer necessary to be given to the public against the employment of this nostrum.

One indirect advantage flowed from the popularity of these remedies. The influence of local treatment was manifested by Dr. Kinglake's cold water practice; and the speedy dismissal of the severest and most painful symptoms of a fit by the agency of one or two doses of the eau medicinale (speaking of it in its most favorable character) proved at once how much the disease, in its most active forms, was one of irritation, whatever might be its radical nature, and that it was not so obstinate, difficult,

and resisting in its nature, as had been usually supposed.

Ere much time had elapsed, the boasted advantages of the eau medicinale were called in question. Its efficacy in removing the paroxysm was by no means so certain as had at first appeared. A few individuals of peculiar constitution, or probably meeting with a deteriorated preparation of the medicine, did not experience any effect from it, good or bad. The majority of persons, however, who had frequent recourse to this powerful nostrum, had more or less cause to regret the experiment; and examples became common of the various forms of severe injury to the constitution which were produced. Its chief tendency was to weaken the tone of the stomach, and debilitate the nervous system; and this occasionally in so high a degree as to produce paralysis; for the most part, also, losing, by repetition, its power of even controuling the immediate symptoms of the disease.

The eau medicinale became chiefly superseded by the introduction of Wilson's tincture, which, being a secret medicine and composed of vegetable ingredients, with some ingredients for disguise, could not be made the subject of chemical analysis. The proprietor of the nostrum boldly asserting that it did not bear any resemblance to the eau medicinale, that it did

not contain colchicum, and possessed equal curative powers with the eau medicinale, without any of its injurious influence, it quickly found favor with the gouty class of invalids. Abundant testimony might be collected for and against the character of this medicine; and I shall give some account of its effects, as they have come within my own immediate knowledge.

One gentleman, who took the tincture very steadily for many months, and was a warm advocate for its effects, relates to me, that the gout, which formerly observed intervals of at least three months, has, since the employment of this medicine, returned every ten or fourteen days. His previous favourite remedy was the eau medicinale; and, from the similarity of the operation in his case, he considers the medicines to be of the same nature.

Another very gouty subject, usually having one severe fit in the year, in the first use of this medicine thought himself possessed of a most valuable prize, and in his joy almost disregarded the gout. But see the quick sequel! His relapses were frequent, and the influence of the tincture over the symptoms became weaker. He was without appetite; he suffered sensations of weight, tightness, and general oppression about the stomach and abdomen; and was highly nervous. At length, during

even all the summer months, he was not free from actual gout for the space of a fortnight; and in vain did he seek relief from his former boasted antidote.

A gentleman of middle age, subject to severe attacks of gout, took the tincture with great relief to the immediate symptoms; but it caused confusion of the head as if he had taken opium; he was rendered remarkably nervous; and his stomach was sensibly weakened for a considerable time. The gout returned severely in a short time.

Another person made use of this tincture with such perseverance, that upon an average he took a bottle a week for two years. He stated "that the gout seemed to be always flying about him, and came on rapidly with much pain if he discontinued the tincture." At length he was convinced of the fallacy of his dependance on this medicine. I saw him at this period, when he complained of much gouty aching and tenderness of the limbs; his nervous system was enfeebled; a pain and soreness at the pit of the stomach accompanied a loss of appetite; and now and then he was affected with a faint sickness.

A gentleman of irritable constitution, when labouring under very painful symptoms of gout, had recourse to this tincture, and derived from it the same remarkable and speedy relief which

he had experienced from taking the *eau medicinale;* but, for several weeks after, he suffered from great debility, nervousness, and loss of appetite. He felt so much weakness of stomach, that he was resolved never to repeat the medicine.

Most persons experience distressing sickness from the continued use of this tincture. At length, the sight of the medicine occasions a revolting nausea.

On the other hand, I have met with a few persons who have expressed great satisfaction from the use of the medicine: but in most of such instances the tendency to gout has been slight. These individuals have succeeded in removing the active symptoms by one or two doses of the tincture; have then taken ordinary medicine; and subsequently have practised the utmost care in regimen. Such are not the common examples of gout; and I could relate an infinite number of cases in which this tincture has, after a time, entirely disappointed the hopes of the patient, and given him more or less cause of regret to have depended on its palliative relief*.

* For additional authority upon the injurious consequences of using Wilson's Tincture, &c. I refer the reader to some Observations on the subject published by Dr. Williams.

About the time that the popularity of Wilson's tincture began to decline, *Reynolds' specific* was brought forward, and held strong rivalship with the pretensions of Wilson's tincture. As happens with all active medicines, this preparation acts very differently on different constitutions. One gentleman relates that by mistake he took almost the whole bottle at a dose, on going to bed. He slept profoundly through the night, and even at noon on the following day could with difficulty be awoke. The symptoms of gout had almost vanished; but he suffered from constitutional debility, and from weakness of the bowels, for a considerable time.

Another gentleman experienced, from a moderate dose of the specific, the most profuse sweating, attended with faintness and debility; and for a considerable time afterwards he was affected every evening with pain at the pit of the stomach.

I am well acquainted with a gentleman, between 50 and 60 years of age, who did not find relief to his gouty symptoms from Wilson's tincture, but much disagreement of stomach; and he had recourse to Reynolds' specific, with better success. He assures me that he took this medicine in alterative doses of from 25 to 30 drops at bed-time, for five nights in a week upon an average, for a space of two years; so

much did he dread any accession of the gout. But, notwithstanding this constant attempt of opposition to the inroads of the disorder, it would occasionally shew itself with some severity; and then he took full doses of the medicine, with the effect of arresting the progress of the fit. Certainly this patient's constitution was remarkably prone to gout; and, at some periods, he had suffered such long continuation of suffering, that he resolved, at any hazard, to try and counteract its return in the manner that I have mentioned. This was not done with impunity; and, indeed, his situation became alarming. He had a bad appetite and a worse digestion; he lost flesh very much; he was exceedingly debilitated and very nervous; the mucous membranes of the intestinal canal and of the bladder were much affected with continued irritation, as was shewn by frequent diarrhœa and the occasional discharge of bloody urine. He was now awakened to his danger, and relinquished the use of the medicine. Twelve months have since elapsed; and it is curious to remark that he has not been more affected with gout than when he was taking the specific; and, by means of aperients and stomachics, regulated diet, and travelling occasionally for change of air, he has considerably improved his general health, but, I fear, will never repair the injury inflicted upon his constitution by taking this strong medicine for so long a time.

About the same period that the nostrums which I have mentioned were in vogue, the late Sir Everard Home published some papers in the Philosophical Transactions, in which he recommended the colchicum autumnale as a specific cure for the gout, directing, as the preparation, "two pounds of the fresh roots to be macerated in twenty-four ounces of sherry wine, in a gentle heat, for six days, the spirit being previously carried off by heat." The author observes, "for the cure of the gout, the eau medicinale of Husson has been most fortunately discovered to be a specific remedy; and it is now ascertained, by experiments on different people, that a vinous infusion of the colchicum autumnale or meadow saffron is equally so, and therefore the two medicines must be considered the same."

It was formerly a question of very lively interest, whether the several nostrums that have been mentioned were different in their nature, or essentially the same, although varying in their composition and strength. In my general Treatise I have detailed my experimental examination of the various medicines, and to which I beg to refer the reader who is curious on the subject. In chemical analysis we cannot act with vegetable matters, for the purpose of obtaining their immediate principles, in the same manner as we do with inorganic substances. I found the nostrums so much dis-

guised by the addition of extraneous matters, that it was impossible to arrive at any exact conclusions of their nature by means of their sensible properties; and hence I was induced to institute a set of experiments, in order to determine the mode of action of the several medicines on the dog; this animal, in the structure and functions of the stomach and alimentary canal, serving very conveniently to the purpose of the desired comparison and illustration. I made trial of the several nostrums, of mixtures supposed to resemble the eau medicinale in their effects, and of various preparations of colchicum; and which were introduced by the stomach, by injection into the jugular vein, and by insertion under the skin.

By injection, 135 minims produced the same degree of disturbance and fatal consequence as 180 minims given by the mouth, and in two hours less time; in the one case in twenty-five, in the other in twenty-seven hours. The morbid appearances on dissection were similar in character; but the inflammation produced by the injection was the most intense throughout the whole digestive canal, the stomach itself shewing a slight appearance of incipient gangrene: the mucous membrane generally exhibited here and there rose-coloured spots, about the size of a large pea.

Wilson's tincture; Reynolds' specific; Sir

Everard Home's preparation of colchicum, and all the other preparations of colchicum, with the exception of the acetic, produced the same essential symptoms and fatal result, and the same general appearances on dissection, as the eau medicinale. In describing the comparative power of the several preparations used in practice, I shall place them in the following order. Eau medicinale, Wilson's tincture, Reynolds' specific, proof spirit tincture of colchicum, wine of the roots of colchicum, Sir Everard Home's infusion of colchicum, the wine of the seeds of colchicum, the acetum colchici. The strongest preparation which I could procure was the expressed juice of the fresh roots of colchicum, concentrated to a dense consistence. I found that 120 grains, mixed with a little water, injected into the jugular vein of the dog, produced violent symptoms more quickly, and proved fatal in rather a shorter time, than an equal quantity of the eau medicinale; and there was not the least material difference found in the state of the intestinal canal upon dissection. The general conclusion which I drew from the whole course of my experiments, was, that all the nostrums, eau medicinale, Wilson's tincture, and Reynolds' specific, were preparations of colchicum. In direct opposition to the results of Sir Everard Home's experiments, I found that the se-

diment deposited by the wine of colchicum, or by his own infusion, consisted chiefly of mucilage and extractive matter, and that it was a perfectly inert substance administered as a medicine. I derived the same result, however, as he experienced in regard to the sediment deposited by the eau medicinale, which acted powerfully; and hence the great difference of operation as a medicine, whether the eau medicinale be administered when poured off clear from its sediment, or with the sediment shaken up. The same dog recovered completely from a dose of the clear liquid, while an equal quantity of the turbid proved fatal in nine hours. I suspect that the composition of this extraordinary medicine may be the inspissated juice of the fresh roots, purified and much concentrated, mixed with a light French wine.

I made comparative trials of the effects of hellebore and opium, and of elaterium and opium, because these compositions were supposed to be analogous to the French medicine; but the results were so wholly opposite to those procured from it and all the preparations of colchicum, that my previous opinion on the subject became strengthened.

The dog recovered from the effects of very large doses of these powerful medicines, as also from digitalis.

In order to compare the quantities of solid

residuum to be procured from the different preparations, and the relative solvent power of the menstrua for colchicum, 100 grains of the following substances were inspissated by a gentle heat, brought to the same state of consistence, and then accurately weighed:

		Grains.
Exp. 1.	100 grains of eau medicinale yielded	$5\frac{3}{4}$
2.	——— Wilson's tincture	11
3.	——— Reynolds' specific	9
4.	——— Spirituous tincture of colchicum	2
5.	——— Acetic preparation of colchicum	$1\frac{1}{4}$
6.	——— Wine of colchicum (so called, from Fisher's, as directed by Sir Everard Home)	8
7.	——— the pure wine itself before distillation	$4\frac{6}{10}$
8.	——— The liquor obtained from the wine, the spirit being drawn off by distillation	$6\frac{5}{10}$
9.	——— A watery decoction, concentrated to the same strength as Sir E. Home's preparation	$9\frac{1}{7}$

From all the different experiments which I instituted, it follows, that, if conclusions were to be drawn from the sensible properties of the different medicines, we might suppose that the quack preparations are unlike each other, and also different from any preparation of colchicum; but when we again reflect, that active substances may be entirely disguised by admixture with those which are inert, we cannot form

any positive inference upon such grounds, and a more solid basis seems to present itself for the determination of the question, in estimating the agency of the several remedies on the human subject. In the medicines Exp. 2 and 3, it seems probable that extraneous matter is added for the purpose of disguise; for the eau medicinale, although yielding less residuum, is much the most active substance. In regard to the preparations of colchicum, the watery decoction contains the largest proportion of solid matter; but I must observe that it is a turbid mixture, and contains much mucilage. In the vinous preparation, Exp. 6, when the residuum of the liquor itself is deducted, rather less is to be referred to the solvent action of the menstruum than in Exp. 4, but more than in Exp. 5. The spirit (alcohol) therefore may be considered to dissolve most of the several principles of the colchicum. I have reason to believe that the acetic acid dissolves all the active principles of the colchicum.

I wish again to state, that three drachms of the eau medicinale, and six of Wilson's tincture, given each in two doses, proved fatal to the dog; and that all the strong preparations of colchicum produced the same effects, both as to the symptoms and the morbid appearances found on dissection. But it is most worthy of observation, that three ounces of the

acetum colchici mixed with magnesia, administered in two doses, did not occasion illness, but merely acted moderately on the bowels and kidneys. I thus offer to the reader the fullest proof of the mildness of this preparation; and whether or not it be useful and efficacious as a medicine, must be determined by its effects on the human subject.

The hermodactyl of the ancients may be considered to have been the same medicine as the colchicum of the present day. Mr. Kerr, in his Essay on Colchicum, observes, "that as the description of meadow saffron given by Dr. Withering, exactly agrees with that of the colchicum of Dioscorides, and hermodactylus of Serapion and other writers, there appears no reason to believe that the descriptions do not apply to one and the same plant." He quotes the following passage from Paulus Ægineta. "Some, during the paroxysms of gout, use hermodactylus as a cathartic; but it is to be attended to, that hermodactylus injures the stomach, creating anxiety and loss of appetite. It should therefore be used by those only who are engaged in business that cannot be deferred; for it speedily, and for the most part within two days, removes the symptoms."

In several of the ancient authors, I have found a similar account of hermodactylus; an admission of its efficacy in removing the sym-

ptoms of a fit of the gout very quickly; but a strong caution also against its employment.

In the practice of the ancients, therefore, we may find most of the active remedies which we now employ. Yet in regard to gout, and to other diseases, we may confidently lay claim to great improvement in our art. Chemistry, within these few years, has lent its powerful aid towards the purification of drugs; has conducted pharmacy to the most important discoveries and improvements; and, looking around the whole circle of medicine, it is surely the fair boast of modern practice, that it is founded on sound pathology, and not governed by any fanciful theory, or the rigid trammels of a system. There is no dogma in physic absolutely to bind the mind of the student. Every one may study for himself the book of nature. The prescription of medicines is brought to the standard of simplicity, clearness, and chemical propriety. The Theriaca Andromachi, or Venice treacle, containing no less than sixty-one articles, and the Confectio Damocriti, or Mithridate, containing forty-five, were retained in use within the last half century. The complexity and confusion of formulas formed one of the worst features of former practice.

In regard to any countenance being given by the regular physician to the nostrums of which I have been treating, my leading objection is derived from a long observation of their

very injurious effects, administered as they are in a manner calculated rather to suppress than cure the disease, and, if taken with frequency, in a serious degree to injure the nerves of the stomach; its mucous membrane, and that of the intestinal canal; impair the functions of the liver; and debilitate the powers of the whole system. The occasional exceptions which may be offered to this statement, by the successful experience of a few individuals, cannot affect the general rule. I should not object to the employment of a medicine merely because its composition was secret, as its effects might be carefully studied, and, when submitted to long experience, it might deserve our confidence, and receive the stamp of general approbation. I might enumerate several secret medicines which in this way have passed the ordeal of time, and are therefore regularly prescribed. There is in the human mind a curious love of mystery; and much is often accomplished by slight remedies, with the nature of which the patient is unacquainted, but to which he gives his faith. In former ages superstitious means were used to work upon the imagination of the sick. Such impositions would disgrace the present enlightened period. I reprobate mysterious conduct, and on the contrary consider that the physician should always be ready to explain clearly his views and principles of treat-

ment. At the same time, I conceive, that an endeavour to simplify the practice of medicine in the utmost degree, neither conduces to the public benefit, nor to the improvement and elevation of our art. I believe rather that popular medicine, extending as it does even to the nursery, leads often to considerable evil and inconvenience; for who will deny that "a little knowledge" is a much more dangerous thing in physic than in poetry?

As to professed empiricism, it is the boast of most quacks that their remedies possess all the necessary potency for the "*certain*" cure of any formidable disease, and yet possess at the same time almost the mildness of "mothers'milk," and safety to the most delicate constitution. Such an union is impossible; and if the medicine be free from noxious properties, more especially if it be inert, the patient sustains disadvantage from the omission of useful treatment; so that, either by the omission of good or commission of evil, he that trusts to the quack, or to any kind of empiricism, wanders from the path of common sense, and prefers darkness to light

In the preface to my first edition of a Treatise on the Nature and Cure of Gout, I laid down the following propositions. "That the gout is a disease not only injurious to the constitution, but destructive of the organization of

the particular textures which it affects; and, by such united influence, tends both to shorten and embitter life:

"That it is as completely within the useful influence of medicine as any other severe disease:

"That the fit may be immediately relieved in its painful symptoms, and materially shortened in its duration:

"That most of its natural bad consequences may, by timely care, be prevented; and, finally,

"That all these advantages may be afforded by means which, in removing the disease, tend at the same time to restore the constitution."

"The security of the patient from future attack, is a question of separate consideration. It is true that it depends much on the medical treatment which is pursued in the paroxysm, and during the period of convalescence; but it is still more connected with the patient's own peculiar care. The gouty diathesis being established in the constitution, it is excited into action by many remote causes: and, certainly, of the chronic diseases, this appears to be influenced by a greater variety of hurtful agents than any other. Hence, without a corresponding observance of regimen, and general care, the gout, ere long, returns. In this case, it will probably happen that the treatment which

was successful in the paroxysm, however judicious it may have been, is regarded as of little value; or is even accused as being the source of disappointment."

"The *prophylactic* means, indeed, deserve the most serious and attentive consideration in every individual case. In no disease, however, can the skill of the physician be proof against a want of care in the general habits of the patient; and those who are not their own physician in this respect, have no right to censure the advice which they but imperfectly follow."

I have the satisfaction of expressing my increased conviction, that the gout is as completely within the useful influence of medicine as any other severe disease; nay more, that in no instance of equally painful disease can the urgent symptoms be relieved with equal certainty and promptness. It cannot be matter of surprise that the disease should be one of frequent return, when we reflect that it is called into action by the influence of so many exciting causes, physical and moral; errors in diet; climate; changes of weather; local injuries; any shock to the frame; and the passions of the mind. Even the nicest care cannot secure an individual harmless from every chance; whilst it is notorious that the majority of gouty persons habitually indulge, more or less,

in the pleasures and errors of the table, and blame their physician for the imperfection of his art, instead of their own conduct. The offender may well exclaim with the poet—

"Video meliora proboque, sed deteriora sequor."

The recurrence of gout being, therefore, dependent on so many remote causes, its cure, or the entire prevention of its return, is always difficult, and, in many instances of strong predisposition to the disease, impossible*. Yet much, very much, is to be accomplished by the skill of the physician, and the care of the patient; and the evil may be infinitely lightened.

I come now to the very interesting point of enquiry, what is the present prevailing treatment of gout?

An individual example is here and there to be met with, in which the fit always proves moderate, its return occurs only at a long interval, and the patient finds the attendant illness so little serious, that he receives the visitation of gout rather as friendly than hurtful to his

* Hippocrates delivered the following opinion: "Ubi vero jam multoties, et singulis fere annis, paroxysmus recurrit, et quos affligit, in articulis tophos habent, sicca alvo vexantur, et senes sunt, ii nulla humana arte sanari possunt." But he observes, "juvenes nondum callos habentes curari possunt, si accurate vivant, laborisque sint amantes alvamque bonam et apertam habeant."

constitution. He is content to resort to a few doses of common aperient medicine, and to moderation in diet, or a short abstinence. Instances of this kind are much too rare to furnish a true picture of the gout, or a rule for practice. In general, it is a disease most severely painful in its immediate symptoms; and which, improperly treated or left to their own course, become indefinitely protracted, and seriously debilitate the constitution, shatter the nervous system to its foundation, and produce, more or less, a crippled state of limbs.

The efficacy of the several nostrums of which I have spoken, and of the various strong preparations of colchicum, in removing the active symptoms of the fit, especially in their first employment, is unquestionable; and hence, Sir Everard Home bestowed on those remedies the high praise of "being a specific cure for the gout." I should not argue against the employment of the active preparations in question merely on account of their being powerful agents; because such an objection might be presented equally against the use of many of our most valuable remedies, as antimony, arsenic, mercury, iodine, opium, and other articles which might be mentioned. The fundamental principle of my objection is, the ill success and final hazard of arresting the symptoms of gout, by means of the strong agency

of this class of medicines which do not reach the internal sources of the disease, and inflict more or less injury on the constitution. In the very same proportion that they are employed and relied upon as the remedies for cure, the gout, so far from being permanently relieved, returns with greater frequency; and endless are the examples in which, instead of the occurrence of a severe and well-marked paroxysm taking place at a distant interval, the pains of chronic gout become almost constant, the nervous system is harassed with irritation, and the constitution impaired in all its important functions. Hence the unfitness of the term, "specific remedy for the cure of gout," which has been bestowed equally on the eau medicinale and on colchicum. If the due administration of cinchona merely broke the force of an intermittent fever, and, instead of counteracting its return, subjected the system to its continual tyranny, in various irregular modes of irritation, should we allow it the praise which it now justly receives, of being a specific remedy?

I admit most fully that all the strong preparations which have been mentioned exert a controul which cannot be obtained over the active symptoms of a fit of gout by any other articles in the materia medica; but I argue, at the same time, that, the cause of the sym-

ptoms having a deeper foundation, and essentially consisting in a state of disordered functions of the abdominal viscera, more or less established, the proper cure of the disease should not be attempted in this way. It is put out of sight, masked, and hidden; but, as already observed, in most instances returns with distressing frequency, and, from the broken, uncertain state of health which ensues, the patient becomes more afflicted with various sufferings, than by his previous regular fits.

The prevailing popular practice amongst gouty persons, for a long time past, and at the present moment, is a reliance on the wine of the roots of colchicum as the remedy for the removal of the symptoms of the fit. Nor is high professional authority wanting to sanction this method.

The pleasing representation of being able to dismiss a fit of the gout in a very summary manner, *cito*, *tuto*, *et jucundè*, would almost lead us to suppose that gout is a very simple disease of irritation, requiring only, for its cure, a few doses of the wine of the roots of colchicum, and some gentle doses of alteratives and aperients, with proper attention to regimen. We do not in such a picture recognise the extensive complications of the malady as frequently appearing, the severe conditions of visceral disease, with a broken state of the nervous

system, which so commonly attend confirmed gout, requiring more profound views of treatment than are contemplated in this agreeable sketch.

Another mode adopted, is, repeated full doses, at short intervals, of the wine of the roots joined with purgative medicine, of which calomel forms a part, followed up till all the active symptoms are removed; and this treatment is to be succeeded by a course of sarsaparilla, and, finally, by the daily use of carbonate of soda throughout the year; the bowels being kept under regulation by the use of purgative pills, with certain attention to diet. Further in the preventive part of this plan, any threatening symptoms of gout are to be opposed by alterative doses of colchicum.

Persons who possess good strength of stomach, and are not enfeebled in constitution, may bear the trying discipline which I have just now stated, without much immediate inconvenience; but there are those who suffer more injury from such treatment than from the disease itself. Lately I saw an elderly gentleman whose written instructions were, that, immediately on the approach of gout, he should have recourse to half-drachm doses of the wine of the roots of colchicum in combination with a purgative, to be repeated every six hours till the gouty symptoms should quite subside. Af-

ter the third dose, he was seized with vomiting and urgent diarrhœa, and he soon became alarmingly exhausted. He was with some difficulty restored.

I am sure that no patient should be authorized to treat himself in this manner; nor can I approve of such an employment of colchicum even with the advantage of medical superintendence. The familiar daily employment of the carbonate of soda is calculated to injure the tone of the stomach, by producing too alkalescent a condition. It sometimes happens, however, that the free use of this alkali even tends to greater acidity—a fact only to be explained by considering that the stomach actually becomes weakened by the medicine; allowing the chemical actions to have their play in opposition to the vital power. We should keep in recollection that, in natural and healthy digestion, the contents of the stomach are always acid*. If the acetous fermentation take place

* Exp. A strong middle-sized dog had been kept tied up and without food for twenty-four hours. He was then fed with a pint of strong beef tea. In three quarters of an hour after, the animal was destroyed by strangulation. The body was opened immediately after death. The beef tea had lost about three ounces in quantity. When given to the animal, it was an uniform mixture. Now there appeared a mass of fibres floating in the liquid. The surface of this liquid had the appearance of saliva, and it strongly reddened litmus,

either as a consequence of a quantity of food being received beyond the powers of digestion, or of a nature unsuitable in quality, the carbonate of soda will undoubtedly be useful, in correcting this morbid process; and I merely contend against its constant employment, and that what is good as a remedy is bad as a habit. The more rational plan, I conceive, is carefully to adapt the quantity and quality of the food, and of drink, to the powers of digestion; in which case the corrective influence of an alkali will not be required, unless, indeed, in the instance of confirmed dyspepsia, demanding a settled mode of treatment. Ample experience has convinced me of the impropriety of opposing the threatened invasion of the fit by any preparation of colchicum; for, however unwise and unnecessary it may be to allow the symptoms, when formed, to pursue their own tedious and painful course, it is too much of a contrary principle to thwart Nature's design

shewing its very acid nature: also the whole of the liquid contents of the stomach reddened litmus, but not so vividly. On opening the duodenum, some thin fluid escaped; and adherent to the coats of the intestine were portions of a dense yellowish matter, viscid, and having the smell of beef. This and the contents of the small intestines reddened litmus more or less. Some chyle was found in the thoracic duct, which was alkaline, rendering turmeric paper reddish, and violet paper green.

altogether, by seeking in this manner to oppose the production of the fit. If it can be prevented by evacuants and abstinence, the principle of treatment is very different. In the one case, we retain as it were the cause of the paroxysm in the system, and merely suppress the disease; in the other, we do much towards expelling it from the body.

A gentleman, aged 52, robust, subject to gout from early life, treated himself with wine of colchicum, and subdued the immediate symptoms of gout, on many occasions suffering more or less nausea and vomiting from the repeated doses of the medicine. The gout has absented itself for a year. From the conclusion of his last use of the colchicum, his general health began to be greatly disturbed; and he is now labouring under confirmed symptoms of hydrothorax!

I have witnessed very numerous cases in which patients have treated themselves with the almost constant employment of Wilson's tincture, or the wine of colchicum, taking large doses on the accession of a severe fit, and smaller for the relief of slighter symptoms. A very frequent and most vexatious recurrence of the disease has been almost an invariable consequence of such proceeding; but often, also, a much more serious result.

A gentleman, aged 64, subject to gout from early life, of strong frame and constitution, but

highly irritable, and impatient of suffering, accustomed himself, in the manner I have stated, to this empirical treatment. For some few years his strength of constitution offered great resistance to the influence of the treatment, although he was often rendered very ill by the repeated doses of one or other medicine. At length he was affected with inveterate dyspepsia, and the most severe state of nervousness. He lost flesh and strength; the sensorium became disturbed with occasional wanderings; irritative fever ensued, the evident attendant of chronic inflammation of the mucous membrane of the stomach and intestinal canal, the irritation of which was manifested by frequent vomitings and diarrhœa, with occasional discharges of blood and mucus. He pined away into gradual exhaustion, and died.

Another gentleman, only 47 years of age, had, with similar imprudence, resorted to these medicines, and with rather greater freedom. At length he was seized with acute gastric fever. Delirium, urgent vomitings, occasionally of blood; and incessant discharges from the bowels mixed with blood and mucus; burning skin, intolerable thirst, and rapid pulse, concurred to mark the danger of the patient, who died in the course of a few days—so unavailing was all the attentive treatment that could be adopted. These were individuals whose apparent strength of frame and constitution gave

early and full promise of longevity; and it is not too much to affirm, that they shortened their lives by using colchicum, in a manner operating as a slow poison.

Having delivered so strong a protest against the inconsiderate employment of the strong preparations of colchicum, the question will be fairly proposed—is this medicine, in any of its forms, a proper remedy to be employed in the treatment of a fit of the gout? In my answer, I trust that I shall not be found inconsistent, if I recommend a cautious employment of the mildest preparation of colchicum which we possess, the acetum, either combined with calcined magnesia and sulphate of magnesia in some pleasant vehicle, or with carbonate of magnesia and the sulphate in a saline draught, as I have fully described in my Treatise, repeated three or four times in the twenty-four hours, during the violence of the symptoms, and afterwards in a more occasional manner, always taking care not to irritate the stomach by nausea or vomiting—an effect however which scarcely ever happens from this combination of ingredients. I make it my object to seek the slightest, instead of the greatest, aid to the removal of the symptoms from colchicum. The difference is extreme between the administration of a strong preparation of colchicum, per se, so that it may exert all its power on the

stomach and nervous system; and the taking of a preparation so mild as the acetum, used in conjunction with corrective and gentle aperients; by which method it is not long retained in the stomach; while the leading object of the treatment is to evacuate freely, yet not severely, the morbid secretions; adding, too, the important influence of mercurial alteratives, the pilula hydrargyri or calomel, according to the indications to be fulfilled; and probably combined with James's powder, and occasional doses of compound extract of colocynth. In the majority of cases, all the severe symptoms of gouty inflammation and pain yield most favorably to this method of treatment, joined with anodyne preparations and sudorifics at night; and, also, with the auxiliary influence of careful local treatment; all of which method I have set forth in my Treatise. The most difficult and untractable cases are those in which some one or other of the strong preparations has been the oft-tried remedy, breaking the force of the acute symptoms, but leaving a disposition to chronic gout in its most harassing forms. The habit of relapse becomes established in the constitution. The strong medicine is not a means of cure; the weaker one is incapable of affording the same prompt and certain relief which it scarcely ever fails to do, when such false practice has not been pursued. But no injury,

present or future, awaits the proper employment of the acetum colchici draught, or of the acetous extract, of which I shall have future occasion to speak. I have been frequently called upon to undo the serious evil which has been committed by the empirical treatment; and by perseverance I have succeeded.

A gentleman, who had been a martyr to gout from his early years, fell into the popular error of taking, first, the eau medicinale, then Wilson's tincture and Reynolds' specific, and, lastly, the wine of colchicum. Instead of being, as formerly, attacked by regular fits of gout once or twice in the year, he was assailed by the disease every four, six, or eight weeks; which had brought upon the constitution every imaginable distress. I found the bowels in a most unhealthy state; and, although the appetite was in general sufficient, the digestive powers and the ulterior process of assimilation had become so impaired, that, to use the expressive language of the patient, all his good food seemed to turn only to his discomfort, and to nourish the disease.

I commenced my plan of treatment solely by the use of correctives and aperients, and strictly regulated diet. When gouty action returned, I employed the acetum colchici, neutralized, and in combination with saline aperients, with every advantage; but, except dur-

ing the prevalence of the irritation of the gouty action, I did not use even this mild preparation. The limbs were freely, and for some continuance, sponged night and morning with a lotion of camphor mixture and alcohol, used at a tepid temperature.

The second stage of treatment consisted in joining the use of a tonic with alterative and aperient medicines; and, as soon as chronic inflammation and tenderness of the joints were removed, they were sponged daily with tepid salt water; and moderate friction and shampooing were employed instead of the evaporating lotion. The diet was made more restorative. The concluding treatment comprehended the discontinuance of alterative medicine, the diminished use of aperients, occasional use of tonics, and continued attention to the limbs, which were further benefited by the use of liniments. Change of air, horse and foot exercise, and all general aids to health and spirits, filled up the plan for restoration with such success, that nearly two years passed away without a return of gout; and in the third year one paroxysm only occurred, which was short in duration, and yielded favorably to treatment.

This patient afterwards was so prudent and careful in his diet and general regimen, that he was rewarded by an almost total exemption from the return of gout.

Another gentleman, between 50 and 60 years of age, who had exhausted the whole catalogue of irregular remedies, and had continued the use of Wilson's tincture till he became nauseated at the very sight of the medicine, was at length so harassed with return of gout, that he scarcely ever felt free from some symptoms of the disorder. He was then debilitated, and in a highly nervous state. His constitution was completely disordered, and every function was more or less unhealthy. The progress of the case was highly interesting.

Under the influence of corrective and aperient medicines, in conjunction with the use of sarsaparilla, the health improved; but gout ere long returned: for, in this case, so strong was the habit of relapse, that it was not reasonable to expect that it would yield in a short time. During the first half year, the gout returned less frequently than before, and less severely. At the beginning of winter, however, after exposure to damp and cold, a paroxysm took place, attended with severe symptoms. The patient hoping that the constitution would receive eventual benefit from leaving the gout to its own course, the most simple treatment only was pursued for the course of three weeks; when he became so much exhausted by pain and irritation, that he was anxious to adopt such

methods as might be recommended for the removal of the gouty symptoms.

The debility of the patient required a mixed plan of treatment; and I directed a draught with the sulphate of quinine, alternately with a saline aperient draught containing at first a drachm dose of the acetum colchici; so that two draughts of each kind were taken every twenty-four hours. At night, pills containing calomel, James's powder, opium, and colocynth, were given, with much advantage. The tender and inflamed joints were treated chiefly with poultices prepared with the evaporating lotion and grated bread, mixed with an equal portion of linseed meal; and soap plaster was applied to the affected parts after the removal of the inflammation; friction and other methods being used in a further stage of the convalescence. The colchicum draught was soon discontinued. After a time, the sulphate of quinine was changed for sarsaparilla. The symptoms were at length overcome, and the convalescence was favorable; but the bowels had been in so confirmed a state of unhealthy action, that a perseverance in alterative treatment was required for a considerable time. Such, however, was the final benefit obtained, that one whole year passed away without any interruption from the gout; and not only was this new comfort enjoyed, but the general state of the constitution was im-

proved in the most satisfactory manner. Instead of sallowness of the complexion and emaciation, a healthy colour and a firm increase of bulk gave assurance of renewed activity and health in the natural functions.

At the end of a year, a fit of gout occurred; but it was completely manageable, and all the acute symptoms yielded favorably in a very short time; a quick convalescence succeeding.

In another instance, the free and continued use of Wilson's tincture had led to such frequent relapses of gout, that the patient, a gentleman, about 45 years of age, was scarcely one week free from actual pain and inflammation. He was rendered extremely nervous, and his complexion was so remarkably yellow as to give full indication of the obstructed and unhealthy state of the biliary organs. The tongue was furred, the appetite irregular, and the bowels were extremely disordered; the excretions being in appearance and odor quite unnatural.

For the first week, an alterative pill was administered every night, and the saline form of the acetum colchici aperient draught twice every day. In the second week the pill was taken every other night, the draught on the following morning; and, in the middle of the day, a dose of sarsaparilla infusion with carbonate of soda. When, after some time, the disposition to the

return of gouty inflammation appeared to have been effectually checked, and the state of the liver and of the bowels had become materially improved, the colchicum draught was used only occasionally; but an aperient was employed every other morning for a considerable continuance, and much aid was afforded to the general strength by the use of the quinine.

This gentleman had passed over a year without a return of gout; and, by paying attention to the regulation of the bowels, and to diet and general regimen, he has enjoyed a new state of constitution, and acquired feelings of comfort and good nerve, to which he had very long been a stranger.

The cases of gout which I have here briefly stated, have been those examples of troublesome relapse which have required a particular method of treatment, including, in the list of remedies, the use of the acetic preparation of colchicum, administered occasionally in conjunction with correctives and aperients, during the prevalence of gouty inflammation.

It happens, occasionally, that the constitution is labouring under the influence of some other disorder, of more serious importance than the gout: in which case, the symptoms of gout for the most part have only a transient stay, and are attended with very distressing disturbance of the nervous system.

In my Treatise, I have laid it down as a principle, that we should attempt the prevention of a fit of gout, if warned of its approach; and interrupt its progress when formed, unless a state of constitution exist, implying that the gout has taken the place of another more serious disease, or may be expected to prevent one which is threatening, and more to be dreaded than itself; but, even in this event of gout, it is highly proper to moderate the violence of symptoms, and protect the system from excess of pain and irritation.

With regard to the question of soliciting the gout, in order that it may take the place of another disease, we are to consider whether it is proper to use any stimulating means, in reference to the existing disease. For example, if a gouty patient have an inflammation of the lungs, bleeding and the usual means of treatment should be practised, with a freedom corresponding with the force of the symptoms; and if any means were used to invite the gout, they should be local only; as the use of a pediluvium with hot water, flour of mustard, and bay salt; and of some stimulating liniment.

Whatever the existing disorder may be, it should be treated with very little modification, according to the actual symptoms, and not upon any fanciful theory regarding the gout. Sometimes another disease takes the place of gout;

rarely, however, altogether superseding it. This may happen as a spontaneous occurrence; but more commonly is induced by some improper management. A gentleman, of strong constitution, in early life, on the first occasion of his having a fit of the gout, adopted Dr. Kinglake's treatment in a most zealous manner. The symptoms were quickly subdued; but a severe asthma was produced for the first time; and from this complaint he has continued to suffer severely; very seldom being affected with any gout, and which disease he would gladly prefer to asthma.

A man, aged 50, of strong frame, of active habits, and not intemperate, had been subject to severe attacks of gout, which, for the last two years, he treated with free doses of the wine of colchicum. Latterly it had disagreed exceedingly with his stomach, causing nausea and sickness, and subsequent dyspepsia. Gout has entirely left him for the last year; but he is now labouring under hydrothorax, which dangerous disease has been gradually forming since the false dismissal of the gout.

It is of more frequent occurrence that the gout supervenes on some other disease, and happily so when the first disease is the more serious of the two. A gentleman, aged 51, of robust constitution, indulgent in his habits of living, had experienced regular attacks of gout

for about eight years. Lately he was affected with chronic hepatitis, and was treated for this complaint with apparent success. While under the moderate influence of mercury, he exposed himself to cold on a damp day. In the course of the following night he was seized with hemiplegia. Notwithstanding the most prompt and active treatment, the symptoms continued for five days without apparent relief. The gout suddenly made its appearance, first in the ankle, and next in the great toe. From that moment the paralysis abated. He could draw up the foot a little; in two days more he could move the fingers; and by degrees, five weeks having now elapsed, he has recovered the use of his limbs. Very acute gout remained upon him for ten days. It was encouraged by means of fomentation and hot flannels. Before the appearance of gout, the urine had been light and clear; but, with the gout, it immediately became deep-coloured, and much loaded with lateritious sediment.

I have known some gouty persons complaining of symptoms evidently threatening apoplexy, who have attempted a more than usually stimulating plan of diet, with an increased quantity of wine, in the idea of forcing the gout; but the sensations in the head soon compelled them to desist from such improper proceeding. One gentleman actually suffered from

apoplexy, in consequence of such hurtful excitement.

The internal use of the Bath water is equally improper under such circumstances.

More particularly between the ages of fifty and sixty, the constitution sometimes falls into a chronic state of indisposition; in which the nervous system becomes affected in a great degree; and although, from want of tone in the system, the different functions are not performed with energy, yet no one organ seems particularly affected. There appears to be a general state of atony. In this description of cases, cordial stimulants and the Bath water are highly useful. Amongst medicines, ammonia, if given in large doses, possesses the highest power towards exciting the gouty disposition into action.

Sometimes a gouty person labours under chronic disorder, in which the tendency to excitement of the circulation, and the disposition to nervousness, seem equally balanced. Here we must steer a middle course, as regards the gout; neither studiously inviting a paroxysm, nor checking it if it arrive; being careful to treat the actual symptoms, on the usual fixed principles of sound pathology.

On the subject of prognosis, it is encouraging for me to observe, that there are many serious states of disease, which are less really

dangerous when affecting a gouty patient, than when similar symptoms affect one who is not liable to gout. In other words, the gouty diathesis so intermixes itself with other symptoms, that, from the disturbance of the nervous system which is so much under the dominion of gout, the case will often appear more alarming than the event proves it to have been.

As illustrating this statement, I may briefly allude to the existence of palpitation of the heart, troublesome in degree and tedious in duration, yielding at once to the occurrence of a fit of gout:—urgent affections of the head; the lungs; the stomach; the bladder; the prostate gland, &c. becoming mitigated very materially by the supervention of the gout. I imagine that this kind of conversion of disease has led some writers, and especially the French authors, to give the appellation of gout to almost every form of complaint which occurs in a gouty person.

Numerous cases have come under my care, in which no sign of gout in the limbs has been present; but the general derangement of system has been such, that the patient has been very desirous of having a fit, in the hope that it would prove a relief. Great nervous depression attends this state of the constitution; which, almost invariably, is connected with a faulty condition of the liver.

A gentleman, aged between fifty and sixty, subject to occasional attacks of regular gout, was sensible of the threatening symptoms of a fit, at a time when his convenience would not allow of his confinement. He took a full dose of Reynolds' specific, which had an active operation, and the symptoms passed away. In about a fortnight, gouty inflammation suddenly appeared in the foot; and this yielded to two doses of the same medicine: but from this period he felt constantly unwell. In three or four weeks after, I was consulted, and found him ill with the following symptoms:—pain of the head and giddiness, with much heat of the scalp, and an apprehension of apoplectic seizure; coldness of the lower extremities; a pulse of much irritation, it being frequent and small; the complexion very bilious; the tongue exceedingly furred; a loathing of food; the usual attendant change in the action of the kidneys, the urine being of a deep colour, and depositing an abundant lateritious sediment; the bowels torpid, and the fæces of an olive green appearance, with an unnatural fœtor. The nervous system was much affected; the short sleeps at night being disturbed with distressing dreams, and the spirits during the day agitated with all the horrors of the hypochondriac imagination.

This was a very genuine example of the

effects of suppression of gout by means of the specific agency of colchicum; or, in other words, its powerful agency in removing the symptoms of gout from sight, while the cause was left remaining in full force within the constitution, and exerting an irregular and dangerous influence on the nervous system. All the important functions were disturbed, and the healthy balance of circulation was completely interrupted. The following treatment was adopted: sixteen ounces of blood were taken from the neck by cupping; the head was frequently washed with an evaporating lotion, and, when unusually heated, was covered with wetted cloths. A pediluvium with a solution of bay salt and the addition of flour of mustard was used a few times, till the extremities became more regularly warm. Repeated doses of calomel, James's powder, and compound extract of colocynth, were administered at bed time; and, in the morning, a suitable combination of magnesia, manna, senna, &c.

Twice a day the patient took a saline draught, with the addition of m. x of tincture of digitalis, and nitre. The diet was fluid, and a very free use of rennet whey was directed, in order to promote the action of the kidneys.

A moderate degree of gout took place in the feet, which was left to its own course. I did not conceive it desirable that severe gouty

inflammation should be produced; for, in such case, the nervous system would most probably have sustained more injury from irritation than could have been compensated by any other benefit; and I was persuaded that the proper application of active medicines was more calculated to restore the various disordered functions, than the mere influence of long-continued gouty inflammation. But this view of the subject is widely different from any plan of checking the gout by what is called specific treatment.

I may add, that it by no means follows, as a consequence, that unrestrained gouty inflammation in the extremities, with its attendant circumstances, would have the effect, in such a case, of inducing the desired healthy action in the visceral functions. As in other forms of disease, the efforts of Nature may be aided most usefully by the interposition of Art.

In the present case, free evacuations having been established, and a material improvement effected in the secretions, an interval of two or three days was allowed for the discontinuance of the mercurial purgative; when it seemed expedient to direct, each night, gr. iv pilul. hydrarg. c. gr. ii pulv. scillæ, and, in the morning, sufficient of an electuary composed of pulv. scammon. compos. potass. supertartrat et confect. sennæ, with the addition of syrup of orange peel. The draught was continued without the

digitalis. The appetite soon returned, and mild solid food was allowed, with some diluted sherry. The secreting functions became materially improved, the urine being abundant and without sediment, and the bile of healthy quality.

The saline medicine was omitted, and, as a tonic, the infusion of sarsaparilla in lime water was first employed; and afterwards the sulphate of quinine in a suitable vehicle. Change of air was one of the means contributing to complete the cure, which, in the course of two months, was most favorably effected.

I shall here offer a few observations on the merits of sarsaparilla, and of the sulphate of quinine, as medicines of restorative and tonic power. There has usually been much difference of opinion respecting the efficacy of sarsaparilla as a medicine*; some practitioners considering that a decoction of it is only useful as a mild vegetable diluent, while others set a high value on its remedial qualities.

* The French Journal de Pharmacie for November, 1824, contains a report of the discovery, by M. Palotta, of an alkaline base in sarsaparilla, to which the name of *paragline* is given. It is procured from an infusion of the roots in boiling water, treated in succession with quick-lime, an aqueous solution of carbonic acid, and alcohol. M. Palotta made trial in his own person of the medicinal properties of this salt. He found that eight grains occasioned nausea, and thirteen slight vomiting. Some speculative observations were added to this statement;

It is, I believe, now very generally admitted, that the efficacious properties of sarsaparilla reside exclusively in the cortical part of the root, and that it is important, therefore, if heat* and long maceration be used, to separate this from the other parts, which seem to consist

but we must wait for further information to enable us to judge of the merits of this salt as a remedy. The results, however, support the conclusion, that sarsaparilla is not to be considered as an inert substance.

* If cold lime water, or cold distilled water, be employed, and the maceration be not continued more than twenty-four hours, the whole of the root may be employed, as I learn from Mr. Battley, without the disadvantage of the menstruum penetrating beyond the cortical part. It is, however, preferable, I conceive, to use the cortex separately, when convenient. Mr. Battley extols a preparation, which he keeps, of the cold distilled water infusion of sarsaparilla, concentrated to a very dense consistence. This is convenient for extemporaneous use; as a small portion of it, diluted, represents a large quantity of infusion. The concentrated syrup is preferred by some, and certainly is highly nutritious, on account of the great quantity of sugar; but it is inconvenient to the digestion of most persons. One of our most eminent surgeons informs me that he esteems sarsaparilla as a medicine of great value. He speaks highly of Hudson's syrup, and of the extract from Apothecaries' Hall. Of the kinds of sarsaparilla root, the Jamaica is now esteemed the best. The smilax aspera, or Malabar sarsaparilla, possesses stronger sensible properties than the ordinary sarsaparilla; and I am persuaded that it deserves the attention of the Profession.

wholly of woody fibre, mucilage, and extractive.

By a comparative examination of equal quantities of an infusion of the bark of sarsaparilla in cold water, in boiling water, and in cold lime water, and also of a watery decoction, the proportion being four drams of cortex to the pint, I found that the cold water took up of solid matter forty grains; the boiling water fifty-two; the lime water forty-four; and the water by decoction sixty-four grains. It is worthy of observation, that the alkalescence of the lime water was destroyed, as was proved by the test of turmeric paper; and hence we may suppose that some acid principle residing in the sarsaparilla had neutralized the lime.

An agreeable mode of administering the lime water infusion is to mix the dose of two, three, or four ounces with an equal portion, or less, of hot milk, and the addition of a teaspoonful, or less, of brandy, adding also from one to three drams of the syrup of the cortical part. When it is desired to introduce the largest quantity of sarsaparilla into the system, some extract prepared from the cortical part may at the same time be administered, either added to the above mixture, or in pills.

We frequently meet with instances of debility in constitutions which do not appear to admit of the use of tonics. Medicines of this

class may at first seem to agree; but in a short time their stimulating power excites feverish irritation, and disorders the system. In such cases the infusion of sarsaparilla may be usually prescribed without apprehension of disagreement.

The sulphate of quinine is a happy example of the benefits which modern pharmaceutical chemistry has rendered to the practice of medicine. In the small compass of one or two grains of this salt we possess by far the most active ingredient of the cinchona bark, as is manifested by its power, in small quantities, of curing an intermittent: but yet it deserves to be mentioned, that there are cases of disease in which it is found more advantageous to administer the bark itself in substance. I have reason to think very favorably of two new preparations of bark furnished by the skill of Mr. Battley, called the liquor cinchonæ cordifoliæ, and the liquor cinchonæ lancifoliæ, in which all the properties of bark are afforded perfect in a state of very great concentration; and the addition of either of these preparations to water gives an extemporaneous medicine of any degree of strength, with less of nausea to the palate, and of oppression to the stomach, than the powder of bark occasions.

Returning from this digression, I have to notice that state of the constitution, in a gouty patient, in which he is troubled with various

feelings of indisposition unaccompanied by gout. He complains of nervousness, an indescribable lassitude, and an inaptitude to mental and bodily exertion. He earnestly wishes for a fit of gout, in the hope of being relieved from his sensations and apprehensions, which he finds more difficult to endure than even the sufferings of the paroxysm itself.

Very commonly the appetite is not deficient, and the stomach itself is not apparently disordered. Below the stomach, however, much uneasiness is felt, in sensations of distention, and from inadequate relief in the daily action of the bowels. The evacuations have an unnatural appearance, varying, of course, in different cases; but, as a general description, I may observe, that they are either unnaturally dark, or light; the one appearance being indicative of a vitiated secretion of bile, together with morbid action in the exhaling vessels of the bowels themselves; the other appearance marking the absence of bile: and these indications will sometimes alternate. There is usually much mucus mixed with the fæces; and when it abounds, the error of function may be considered to have been of long standing. Sometimes the fæces are passed chiefly in the form of pellets, with effort and irritation.

The urine is variable in quantity; on some days being scanty and of a dark colour, and on

others profuse and pale; but, in general, that part of the secretion which is most connected with digestion, namely, that which is passed at night or in the morning early, deposits on cooling a considerable quantity of sediment, which is of a bright pink colour, or has the appearance of brick-dust. In persons of a nervous constitution, this kind of sediment, which abounds with uric acid, alternates frequently with a whitish sediment and a shining pellicle on the surface; and these last appearances indicate an excess of the phosphoric acid. With each kind of sediment, an excess of mucus is present.

In persons of a full habit, the symptoms will be of a nature strongly to mark the irregular condition of the whole system, and a disturbed balance of the circulation. The head may be disordered with sensations of weight, confusion, occasional giddiness, frequent heat of the scalp, aching, noises in the ears, and impaired vision. Palpitation of the heart is a very common symptom. The occurrence of a fit certainly does sometimes, in a great measure, prove a source of relief to the system; but, if there be an established state of error in the respective functions of the digestive organs, such relief will be neither complete nor permanent.

A gentleman, aged forty, subject to hereditary gout, of the mixed temperament, corpu-

lent, and very plethoric, was attacked with severe gout in both feet, and was treated with one or two calomel purgatives and the wine of colchicum in free doses; by which means the symptoms were soon removed; but he experienced three relapses, with intervals only of three or four weeks, the same treatment being adopted, with a direction that in the plan of prevention, he should regulate the bowels by the use of pills with colocynth and scammony, and take daily doses of carbonate of soda, and pay proper attention to diet.

When I was first consulted, I found every sign of congestion in the vena portarum system, and as confirmed a state of unhealthy secreting functions as I had ever witnessed. There was much abdominal fulness, especially in the right hypochondrium, occasional dull pain in that situation, passing round to the back, with now and then a sense of heat: the head was affected with sensations of fulness, and now and then of dull aching, and of giddiness on sudden change of position: on the least stooping, the whole of the face would be strongly flushed: there was great depression of spirits, and an indisposition to any kind of exertion: the appetite was not deficient, nor did indigestion particularly affect the stomach; but the alvine discharges were most unnatural, and often quite black, presenting the appear-

ance of what the antients called atrabilis or black bile; the urine, for the most part, depositing the lateritious sediment very copiously.

This appeared to me a strong example of gout as a secondary disease, entirely the offspring of internal error, and which for its cure required very different means from the use of colchicum. He had been led to suppose that he should enjoy his health immediately on the removal of the gouty symptoms; but he found, to his surprise, that he did not acquire any comfortable feelings, and that the gout itself returned in the most vexatious manner, as already observed. I directed cupping at the neck with much advantage to the symptoms affecting the head; a course of alteratives and aperients, and a much more strict plan of diet than he had hitherto adopted, allowing light animal food only twice a week, and, on the other days, boiled fish, vegetables, and farinaceous pudding, with very weak cold brandy and water as the beverage. The amendment was very slowly yet surely effected; and, although gouty paroxysms returned, the attacks became slighter and occurred at longer intervals. Six months elapsed before the cure was effected, and the treatment was concluded with a visit to Cheltenham, the patient still continuing the use of alterative pills, in conjunction with the saline purgative water.

The draught thus presented by the hand of Nature becomes a happy substitute for regular medicine; and, in union with the early morning regimen, there are the advantages of change of air and scene, of new excitements to the mind, and new incentives to take regular bodily exercise.

A considerable interval has now elapsed since the perfect recovery of this gentleman. He is well rewarded for the admirable patience with which he pursued regular means of treatment.

I cannot refrain from an allusion to the peculiar impatience which gouty persons often manifest under medical treatment; and this is seen chiefly in those who have been in the habit of quickly driving away the symptoms, by the empirical use of colchicum or of some of the nostrums.

It deserves to be always borne in mind, that the gout, which we recognize under that name only by its outward signs, is, in every sense of the word, a secondary disease, an inflammation less distinctly independent in its local action than any other, allying itself with various conditions of the constitution; with the state of the circulation, and the condition of the blood itself*;

* That the blood undergoes remarkable changes in different diseases, I think no reasonable doubt can be entertained; but of the nature of such changes it is extremely difficult, if

with the state of the nervous system physically, and of the mind morally; with the functions of all the abdominal viscera, and of the skin.

As no two cases of gout can, in all their

not impossible, to arrive at any accurate knowledge by means of chemical investigation. The blood, being a product from the action of the solids, its changes are to be viewed, I apprehend, more as an effect than a cause of disease, except in the instances of its being contaminated by morbid poisons: yet, in this point of view, the reflected, immediate influence of the blood on the vessels, and its secondary influence on the nervous system, must be great and important. I believe, as I have observed in my Essay on the Blood, that the humoral pathology has, of late years, been too violently discarded; and that, from the doctrines of the ancients and early moderns, we have gone too much into the opposite extreme. I am sure that it is always incumbent on us to bestow our best consideration on the state of the fluids of the body as well as on that of the solids. In regard to gout, the hypothesis of supposing that the chalk-stone products were a deposit from the circulating blood, of the material cause of the whole disease, was in the highest degree inconsistent. I may here notice that I made an examination of five specimens of chalk-stone concretion taken from gouty persons; and, in addition to the urate of soda, in each detected the presence of a small portion of lime. One specimen was examined as follows: treated with dilute acetic acid, it exhibited a slight appearance of effervescence, and the solution was rendered turbid by oxalate of ammonia. Another portion, after incineration and digestion in acetic acid, still afforded evidence of lime by subsequent treatment with nitric acid and oxalate of ammonia. Hence the inference that this concretion contained both carbonate and phosphate of lime in minute proportions.

circumstances, prove exactly alike, so it must follow that no exact and uniform method of treatment can be laid down as proper to be pursued on every occasion without judicious modifications. Even the same individual may require very different means of treatment in different attacks, according to the particular state of his constitution and the force of the symptoms. On one occasion, the paroxysm may have been induced by accidental excess at the table; on another, by exposure to wet and cold; on another, by some violent emotions of the mind; or by some bodily accident communicating a shock to the whole frame. Fulness of habit, with strong vascular action, may predominate; or, on the contrary, high nervous irritation, without any truly inflammatory diathesis. An emetic may be most proper as the first remedy in one case; bleeding in another. Sometimes very active doses of medicines are required; sometimes moderate are to be preferred for the same individual under different circumstances of attack. Hence, therefore, the unfitness and irrationality of empiricism, and the propriety and value of scientific treatment, founded on careful observation and inductive principles.

I affirm that every troublesome case of gout is more or less connected with and depending upon a wrong action of the liver, and

a faulty condition of the bowels; and that this state of disorder and gout stand in the relation of cause and effect. The patient is disposed to think that gout is his only disorder, and that he may fairly impeach the skill of the physician if he do not obtain a speedy cure. It is too probable that he refuses compliance with the steady and slow plan of treatment which can alone be useful; and he resorts to irregular methods, or leaves the disorder to its own course. In every case of this description, which must require time, it is incumbent on the physician to announce this important truth at the commencement—that the gout, occurring occasionally, is to be viewed only as the secondary disease; and that the patient must resign himself to the gradual influence of remedies, in the same way that he would do, without murmur or objection, if he were labouring under confirmed bilious complaint without the participation of gout.

In these circumstances, I avoid entirely the use of the acetum colchici, unless troublesome gouty action be present, and employ, with some little modification, the same line of treatment I should consider proper in the case of any individual suffering from chronic bilious disorder who never had shewn any disposition to gout.

It would be foreign to my present purpose to enlarge upon this view of the subject; but I

think it necessary to offer some remarks on the use of mercury.

I consider it an axiom of importance, that mercurial medicine should never be administered to gouty persons to any extent which carries with it the risk of producing mercurial fever.

I make it a rule to employ it with a view to immediate purgative action, or as an alterative, in conjunction with aperient medicine.

When the alvine excretions are morbidly dark and fœtid, and the urine, on cooling, deposits pink or lateritious sediment, I give the preference to a moderate dose of calomel, combined with about a grain of James's powder, some compound extract of colocynth, and two or three grains of extract of poppy, to be administered at bed-time; directing a suitable aperient to be taken in the morning, before rising.

This method being continued, with occasional intermission, till the appearances afford the evidence that vitiated secretions are effectually removed, it will be expedient to use the more alterative form of mercury; as, for example, the pilula hydrargyri, the hydrargyri oxydum cinereum, or the pilula hydrarg. submur. compos. in combination with the compound extract of colocynth, or the extract of rhubarb; giving regularly a gentle aperient in the morn-

ing, of a nature not calculated to weaken the stomach, or produce nausea. The pilula hydrargyri is the mildest of these mercurial preparations. Half a grain or a grain of ipecacuanha, and a grain or two of Castile soap, may, on many occasions, form an useful addition. I prefer the ipecacuanha, if desiring to increase secretion into the bowels; the powder of squill, if wishing to act upon the kidneys; and James's powder for the purpose of promoting a proper action of the skin.

When the biliary functions are completely restored to health, the mercurial alterative should either be laid aside, or used only occasionally; but, when the action of the liver and of the intestinal canal is permanently in error, the value of continued mild doses of mercurial medicine, in conjunction with aperients and corrective tonics, is, in my mind, unquestionable. The alterative administered at bed-time, and the aperient before rising in the morning, afford real benefit and sensible relief. In this manner also, an increased action of the bowels may be maintained for a long time without producing debility; because the morning medicine does not rob the patient of nutriment, while it ensures the removal of vitiated accumulation from the bowels. Aperients given during the day, if long continued, tend to reduce the strength and flesh by preventing a sufficient stay of the food for perfect digestion.

I am solicitous to draw the just line of distinction between the use and abuse of mercury. If employed with judgment and caution, it is the most valuable agent in the materia medica for effecting the desired change of action in the different secreting organs connected with digestion; and I confess my regret that any respectable author in medicine should level accusations against almost any use of mercury, which can only, with the smallest propriety, be offered against its abuse.

In gouty persons, and those also who are not subject to gout, we meet with examples of constitutional indisposition so obscurely marked, that, unless we investigate the nature of the excretions from the alimentary canal*, and the kidneys, in a very regular manner, we shall

* I cannot refrain from making a slight allusion to a state of complaint in the intestinal canal which is sometimes very mysterious in its character, while it is productive of the most distressing symptoms. The bowels are in a very irregular state, but for the most part confined. At one moment they are torpid and scarcely affected by powerful doses of medicine; at another, they are very sensible and easily irritated. Medical treatment appears unavailing. The nervous system participates in the disorder with exquisite sympathy. Such cases, of which this description is but a slight outline, I have seen to arise from stricture in the rectum. The successful treatment consists essentially in a judicious employment of the bougie. I am acquainted with one most important case of this description, which had been for some years overlooked. The stricture commenced at six inches from the extremity, and was tor-

fail to obtain any knowlege of the nature of the case or its proper treatment.

I frequently have occasion to see chronic cases of this kind. The patient is at a loss to describe his complaint; and more especially as it often happens that the bowels are regular in their daily action. He speaks of nervous depression and occasional lassitude, and probably suffers some degree of pain or rather of uneasiness in the right side (the hypochondriac region), or shoulder, or shoulder-blade. Frequently the sleep is unrefreshing; but, beyond this description, I have no material mention to make of sensible symptoms.

In general, it happens that the appetite returns with each returning hour of meals; but it is evident that the digestion is not perfect; for I have invariably detected that the patient has lost flesh, and more particularly has not his natural firmness in the muscles of the limbs. The abdomen is usually distended and unyielding to pressure when examined by the hand.

In conducting the management of such a case, it is indispensable that we examine the alvine and urinary excretions daily; and we must be careful not to suspend the united influence of medicine and regimen till we have suf-

tuous. The life of this patient was saved by the careful and continued use of bougies.

ficiently continued evidence of the restoration of healthy function*.

By means of such attentive treatment, the gouty patient is spared the sufferings of a paroxysm which would certainly take place if the insidious error of functions, which I have endeavoured to describe, were allowed to proceed without the interposition of proper remedies.

The observation, as regards the prevention of greater evils, is equally applicable to those who suffer from gall-stone or other acmé of bilious disorder, and which, in constitutions so predisposed, is a common consequence of the neglect in question.

* A gentleman, aged forty-seven, had been suffering dull aching pain in the situation of the right kidney, during many months. He was dyspeptic and had lost flesh. His spirits were extremely depressed. From high authority, an opinion had been delivered, that, in all probability, the kidney was irritated by the presence of calculous matter; and a method of treatment, founded on this conclusion, had been pursued for a great length of time without the least benefit. I found the secretions so unhealthy, and the complexion so remarkably bilious, as immediately to assume an opinion that the posterior part of the liver was the seat of pain, and that the whole complaint was in the liver, and not in the kidney. The urine was usually as deep in color as porter, and the alvine evacuations were most unnatural. By means of a course of mercurial purgatives, and other means prescribed in reference to this view of the case, the patient, after some months, perfectly recovered.

Before I take leave of the subject of the treatment of a paroxysm of gout, I wish to deliver my sentiments more at length respecting colchicum, and to consider the merits of opium as an auxiliary remedy. I venture to assert, as a principle, that, in the administration of colchicum, it should be our care to use it with a most sparing and cautious hand, viewing its effects rather as palliative than curative, as subordinate to the more radical means of treatment rather than as the chief agent for the cure of the disease. As I have already had occasion to observe, the acetum colchici is the mildest of all the preparations. The Pharmacopœia directs one ounce of the fresh roots to seventeen ounces of fluid, sixteen of diluted acetic acid, and one of proof spirit. For the vinum colchici (so called) the proportion of the fresh root is twelve ounces to twelve ounces of fluid, four of proof spirit, and eight of water. But, besides this extraordinary difference of strength, arising from the different quantities of material in the two preparations, we may consider that the acetic acid exerts a modifying power over the active principle of the colchicum (veratrine), as it does over opium and squills, rendering its action on the animal economy milder. When the acid is neutralized by an alkali, the colchicum still remains in solution. When desiring the most

cooling form of draught, I give the acetum with a dose of neutralized lemon-juice and carbonate and sulphate of magnesia; and, when inflammatory action is more than usually active, I add tartarized antimony. If wishing more distinctly a purgative effect, I substitute the calcined magnesia for the carbonate, omit the neutralized lemon-juice, and probably add some tincture of senna or a small portion of tincture of jalap. In most instances, and especially where the empirical* treatment has

* In using this term, I intend to employ it in its inferior sense rather than in its original signification. Galen mentions in his time three sects of physicians—empirics, methodists, and dogmatists. The etymon of empirics is πεῖρα, experiment; and, in the interpretation of making experience rather than mere doctrine the rule of practice, a good physician might be called an empiric. Yet this is open to the criticism, that he who is resolved to pursue one beaten track, under the idea that it must be the best path, because it has often conducted him into the road which he has sought, fails to profit by new lights and improvements; and he becomes a mechanic in the practice of physic, rather than a philosopher whose study it should be to reflect on all new circumstances, and accommodate his judgment to them. He is an empiric, as I conceive, who adheres to a particular remedy or mode of treatment in all cases, without the study or inclination to exercise any discrimination of the differences of constitution, and the various modifications of the disease itself, which must happen from many causes, immediate and remote. The *quack* is, I consider, a term of stronger reproach, and signifies one who, without education or the slightest knowledge of the principles of me-

not been before employed, the continued use of this draught fulfils, towards the removal of the gouty symptoms, all that a prudent physician should desire to obtain from colchicum. I sometimes prefer the administration of the acetum colchici reduced to the solid form, and in a pill. The idea of making a preparation of this kind occurred to me some years ago, when I requested Mr. Garden, of Oxford Street, to evaporate the acetum colchici down to the consistence of a soft extract, over a water-bath, at so low a temperature as to be free from all risk of decomposing the material; in which state it may be considered that one grain is equivalent to eighty minims of the fluid. I commonly direct two grains of the subcarbonate of ammonia to be united with one grain of this extract; conceiving that the medicine agrees better with the stomach when the acid is neutralized. It may be joined with sedative ingredients, as Dover's powder, or conium, or hyosciamus; or with a purgative, as the compound extract of colocynth, or extract of rhubarb, as circumstances shall direct; or it may be given alone.

I have much pleasure in finding that this preparation is used at several of our hospitals, and by medical practitioners whose opinions I

dicine, ventures to practise, and impudently boasts of the certain power to cure diseases.

much respect, with great success, in cases where the moderate influence of colchicum is desired; and I may add, that the learned President made mention of it with approbation in the elegant paper on Gout which he read to the College in June 1831.

My experience in the treatment of gout requires me to state, that, in some inveterate paroxysms, the gouty action produces an extraordinary degree of irritation of the nervous system, that does not yield to the purgative colchicum draught of which I have been speaking; and further, it may even be desirable to suspend the excitement to the bowels*. I have been induced, under these circumstances, to prescribe the acetous extract joined with a sedative; or, in some instances, to choose the vinum colchici; giving it, however, in the most cautious manner, and seeking rather to diminish than suddenly to dimiss the gouty action.

I shall take this opportunity of noticing a new preparation of colchicum, which comes from the hands of Mr. Battley, whose zeal and skill in the laboratory have proved highly use-

* In a few instances of protracted gout, the patients having the nervous temperament in the highest degree, I found great advantage from having recourse to the sulphate of quinine joined with sulphate of magnesia; wholly omitting colchicum. Under this treatment, the gouty inflammation gradually disappeared.

ful to the profession. This is the inspissated juice of colchicum, obtained by expressing the fresh roots, and which by a certain process is purified and carefully concentrated to the consistence of an extract. I am favored with the following statement of the efficacy of this medicine from Dr. Hue of St. Bartholomew's Hospital, whose authority will, I am sure, receive full regard:—"I have so often witnessed the very uncertain* and variable effects of the wine of the roots, and of the seeds of colchicum, and more particularly of the acetum, that I was on the point of trying this very valuable medicine in substance, when I met with what I was looking for in the inspissated juice, *an unsophisticated* preparation. I have given it a most extensive trial, with a success which has exceeded my most sanguine expectations. In acute rheumatism, the most severe symptoms have given way to the medicine in not longer than twenty-four or thirty-six hours after its

* In the course of my experiments I found much difference in the goodness of the colchicum roots, some being very porous and spongy, and absolutely inert in quality. Mr. Battley pronounces the following as the signs of a good root:—"roundness, plumpness, firmness on cutting, and being covered with a creamy matter immediately on being incised. The most fit time of the year for taking up the root is in June, before the offset from the parent root is formed." The best roots are procured from Oxfordshire and Buckinghamshire.

exhibition; and the proportion of favorable cases is so great as to justify the strongest terms which I might be disposed to employ in recommending it. I have less experience of it in gout. The dose of the preparation is one grain every four hours; and as soon as it may have produced either sickness or purging, I give it only every six hours, or even at longer intervals, or altogether withhold it."

I have had a few opportunities of administering this extract, in cases of rheumatism, and in some of the cases of high gouty irritation to which I have just now alluded as constituting exceptions to my general rule of treatment. I have been perfectly satisfied with the efficacy of the medicine, and seen it agree much better than the wine. I am persuaded that it is the most certain preparation of colchicum which the physician can prescribe, when he desires the highest dependance on the medicine.

In the treatment of acute rheumatism, there is far less objection to the employment of colchicum, so as to bring the system decidedly under its influence, than in the treatment of gout; for the rheumatic inflammation is very much less a secondary disease than that of gout; nor is acute rheumatism a disease of certain return, like gout. I know many individuals who have never experienced more than one attack of rheumatic fever; and although in a very severe degree, they have for many years

since been strangers to rheumatism in any form.

The utility of opium, in some of its forms, administered for the relief of pain in gout, is most unquestionable; and indeed the successful employment of this agent is one cause which leaves me more at liberty to use colchicum with particular moderation. I wish here very distinctly to state, that in any case of gout, in which the constitution of the patient, either from previous abuse of the medicine, or from idiosyncracy (peculiarity) of constitution, proves decidedly unfriendly to the action of colchicum, I should have no despair of removing the symptoms, within a very reasonable time, solely by means of opiates, sudorifics, purgatives, and alteratives, joined with suitable local treatment, and a proper regimen.

I have had much reason to be satisfied with the effects of crude opium and James's Powder, one grain of the former and half a grain of the latter, with occasionally a grain of camphor, in a pill; directing the patient to take, at night, two pills as the first dose, if in much pain, and repeat one every hour, to a certain extent, till sufficiently relieved. It must always be held as a necessary preliminary that the bowels are not restrained, and that the biliary secretion is not much obstructed. It happens sometimes that the inflammatory diathesis prevails so strongly, that opium wholly fails to relieve pain, and proves

rather a source of distress than of relief to the patient. In such an example general bleeding or cupping must be used, in order to its successful employment. Those persons who can take opium without the least disagreement, may have recourse to the tincture of opium of the Pharmacopœia, joining it with antimony if there be heat of the surface.

The *black drop* is a good preparation of opium, and sometimes agrees better than any other. The late Dr. Armstrong, in his valuable publication on "Typhus, and other Febrile Diseases," gives the following account of this medicine: "The black drop was orginally prepared, upwards of a hundred years ago, by Edward Tonstall, a medical practitioner of Bishop's Aukland, in the county of Durham, and one of the Society of Friends. The recipe, passing into the possession of a near relative, John Walton of Shildon, who also prepared that medicine, was found amongst the papers of his brother, the late Edward Walton of Sunderland, and, by the permission of my much respected friend Thomas Richardson, senior, of Bishop's Wearmouth, one of his executors, it is here inserted.

"Take half a pound of opium sliced; three pints of good verjuice:—one and half ounce of nutmegs;—half an ounce of saffron. Boil them to a proper thickness, then add a quarter of a

pound of sugar, and two spoonfuls of yeast. Set the whole in a warm place near the fire for six or eight weeks, then place it in the open air, until it become a syrup: lastly, decant, filter, and bottle it up, adding a little sugar to each bottle."

Dr. Armstrong quotes the authority of a friend, in estimating the strength of this preparation to be as one to three, compared with the ordinary tincture of opium. He considers from his experience that this view is just. I was formerly of the same opinion; but my later and more careful trials have led me to conclude, that the difference is rather more than as 1 to 2, but not so much as 1 to 3.

Ford's laudanum, so called, prepared with cinnamon and other aromatic spices, is very cordial to the stomach and bowels, and is much to be recommended when irritation and relaxation of the intestinal canal prevail.

Battley's *sedative liquor of opium* is a truly excellent medicine, and often agrees well with those persons to whom all the preparations just mentioned prove too stimulating. I usually give it in a saline mixture with the addition of some tartarized antimony, so that the action of the skin may be excited to a moderate perspiration.

With some individuals, however, even this sedative liquor proves inconveniently exciting;

and they are disordered instead of being composed. When there is reason to believe, from former experience, that any of these preparations would disorder the sensorium, causing watchfulness and confusion instead of sleep and comfort, I should prescribe, as I have often done with perfect success, the acetate* of morphia, which is fully competent to the relief of pain, in free doses, and most happily tranquillizes the nervous system in minute doses.

I have adverted to the advantages of local remedy as an auxiliary part of treatment. The benefit derived does not relate merely to present relief. If the gouty inflammation be left to its own course, some change of the organization in the affected textures is a common consequence, and certainly ensues from repeated attacks of inflammation. The evaporating lotion (alcoholis ℥iv, mist. camphoræ ℥viii) which I recommend, applied tepid by means of linen rags, usually affords great relief to the burning sensations, shortens the duration of the inflam-

* If the acetate be perfectly pure, it will dissolve completely in distilled water. It is convenient to keep it in solution for the purpose of easily dividing the dose. The sixth or the fourth of a grain will have a better effect in tranquillizing the nervous system than a larger dose. Having had so much cause to be satisfied with the acetate, I have not made trial of the muriate of morphia.

mation without repelling it, and greatly tends to prevent the deposition arising from morbid secretion, and the eventual thickening of the textures serving for motion. If the rags be continued at night, they should be covered with a layer of oil-silk, to prevent the speedy evaporation. It is often advantageous to apply, at night, a poultice made with equal parts of grated bread and linseed meal, and the lotion, covered with oil-silk. I find that this remedy succeeds much better than more medicated applications. There are cases in which a poultice of more stimulating qualities should be preferred. The patient sometimes entertains a very natural apprehension that the use of this evaporating lotion may cause a retrocession of the gout to some internal part. Every question is to be decided by experience; and I am fully confirmed in my conviction of the safety as well as the advantages of the treatment. Indeed, I have witnessed, again and again, that the inflammation has confined itself to one part more steadily when this treatment has been used, than when no interference has been used. It happens, with a few individuals, that there is a particular disposition for the gouty action to transfer itself suddenly from one part to another; and, if this were to occur under the use of the lotion, the treatment would suffer the reproach; more especially if some

internal part became affected. If, therefore, I were acquainted with such an idiosyncracy, I should probably be induced to avoid, for the most part, if not altogether, such local treatment. In all cases of violent attack, I should wait a day or two before adopting it, in order that the constitutional remedies should first produce a considerable effect; for when the symptoms prevail in the highest activity, a slight advantage only might result from local means. I consider this the more correct method, and invariably proper when severe gout is affecting many parts at the same time. In such examples, also, I should apply the local remedy only to one or two of the most suffering parts at one and the same time.

Immediately after the removal of the preternatural heat, the only modes in which the lotion should be used is by sponging the parts for several minutes two or three times in the day, applying the poultice at night, if necessary, for the removal of tenderness. The sponging process is used most conveniently by means of two hand basins, the one placed in the other: hot water being poured in the under basin, the lotion in the upper; so that the desired comfortable temperature is easily kept up.

In those cases of gout in which the constitution yet maintains its vigor, the paroxysm

most commonly leaves the limbs free from serious debility, and more especially when the local treatment which I recommend has been employed; but in other instances, the infirmity produced requires particular attention. The rubbing in of liniments upon the affected parts is to be recommended, rendered either stimulating in their composition, or of an evaporating and sedative nature, as the circumstances of the case may suggest. Of the former kind, I may mention, equal parts of the linimentum camphoræ compositum and the linimentum saponis compositum, with a certain proportion of tinctura lyttæ, and the further addition occasionally of the liquor ammoniæ; of the latter description, equal parts of linimentum saponis compositum and liquor ammoniæ acetatis, to which, in cases of local pain without inflammation, opium may be added. The oleum camphoratum is proper when stiffness and rigidity affect the tendons and joints.

For induration of parts, great benefit will often be derived from the use of the hydriodate of potash ointment.

When weakness affects the limb to the degree of œdematous swelling, and when the several textures which serve to motion are stiffened and contracted, a more systematic plan of friction and shampooing will be required;

and to which treatment, the application of elastic bandages, and the daily sponging with salt water, should be added.

At the fit season of the year, the gouty as well as the rheumatic patient may visit Buxton with every prospect of benefit from the baths of that place. The temperature of the natural bath is 82°, and, being intermediate between the warm and the cold bath, spacious also, and allowing the opportunity of swimming or otherwise keeping in free motion, the patient experiences a refreshing and highly tonic effect from its influence, provided that he perseveres sufficiently with its use, and employs it in a proper manner. As a preliminary, the use of one or more tepid baths (which are prepared with water from the tepid spring) is almost always proper, and often important. Some preparatory medicine is also in most instances very necessary, and attentive regimen during the whole course of bathing should be observed as a condition of reasonably expecting the advantages which this bath is capable of affording. The remarkable cures which are annually effected amongst the invalid visitors, and the patients at the charity bath, are well calculated to sustain the reputation which the Buxton bath can boast of for centuries past; nor can its sanatory merits be too highly extolled, nor too generally known.

A statement of the nature of the bathing institution to which I have just alluded, may, I think, with great propriety, be made in this place; and of the important benefits rendered to the afflicted poor, I can, as the physician of the charity, bear my ample testimony.

At a meeting, held at the Great Hotel, Buxton, on the 18th of January, 1830, Charles C. Western, Esq. M.P. in the chair, it was resolved "that the following appeal to the public should be addressed, through the medium of their chairman, to the principal nobility and gentry in Derbyshire and the adjoining counties; to gentlemen of the faculty, and other persons throughout the country at large, who were likely to take any interest in the success of the Institution."

"The extent of the relief to the unhappy objects of this charity is, in the first place, necessary to be laid before you; and upon an examination, by the meeting, of the accounts of former years, I am enabled to state to you that, upon an average of the last four or five years, about *eight hundred persons* have annually had the benefit of the baths granted by the noble proprietor — medicine from the funds of the charity—and gratuitous advice from the medical trustees. Above *four hundred* of these persons have also received an allowance of five shillings per week for three successive weeks, the time in

general considered to be sufficient, though in many cases a longer period would be highly desirable, if the funds of the charity would allow it. The number of patients admitted this year has not been reduced; but the defalcation in the funds being to the extent shewn in the report of the annual meeting, it is evident that the further aid of the public is indispensably necessary to the continuance of that relief which the charity has been hitherto enabled to afford.

"The reputation of these Springs has been long known and generally acknowledged; but it is the strong opinion of this meeting that their remedial and restorative powers are by no means adequately appreciated by the principal inhabitants of the surrounding neighbourhood; nor does it appear that they are even sufficiently known to the faculty in general, or to the country at large. But it is impossible for persons who have been in the habit of visiting this place, and who have watched the rapid progress which the patients of this charity exhibit, from the lowest stage of disease to renewed energy and health, without being convinced that the most important sanative effects are produced by the proper use of these Springs, in a great variety of cases. The situation of this place is peculiarly calculated to furnish examples of extraordinary and varied cases of disease, being within a short distance of the great manufactur-

ing towns of Leeds, Manchester, Sheffield, Birmingham, Macclesfield, and Stockport. Multitudes, broken down by the confinement and unhealthy nature of their employments, come here miserable spectacles of accumulated disease, the greater portion of whom recover, in an almost miraculous manner, their health and strength, and are restored to their families and friends.

"It is most material to observe, that the medicinal qualities of these waters are by no means confined to the cure of rheumatism and gout. In almost all cases of debilitated and broken-down constitutions, the effects of acute or chronic disease, climate, or intemperance, as well as the unhealthy occupation of the workmen in manufacturing towns, the most beneficial results are experienced from the use of the baths, and the waters taken internally. The powers of the digestive organs are wonderfully restored: the skin being brought into a more healthy state by the bath, aids the relief given to the stomach by the water which is drunk, and thus a healthy action of the whole system is brought about, the patient is restored to his former vigour, and a condition of permanent health.

"The peculiar air of this place should not, perhaps, be wholly overlooked. It is elastic and dry, owing to the elevation of the district in which it is situated, and its lime-stone soil. When rain falls it is speedily absorbed, neither

leaving dampness nor moisture to depress the patients, or counteract that general bracing quality of the atmosphere so conducive to their recovery.

"It is submitted, that, upon these considerations, not only would it be a matter of serious regret that the funds of this Institution should fall off, but that it is most earnestly to be desired that we should be enabled materially to increase them; and I trust you will feel that, with the hope of accomplishing this object, the meeting, of which I have the honour to be the organ, is fully justified in making this special appeal.

"Were the salutary powers of these Springs more generally understood, thousands among the higher classes might be restored to health and happiness; and numbers of the afflicted poor returned to their families, again able and active members of the community."

The benevolent and highly respected chairman signs this address, and thus expresses himself:—"In conclusion,—I venture to take the liberty of expressing my individual conviction of the correctness of the opinions herein given by the meeting. I have visited this place very often; I have had abundant means of observation; have watched the singularly beneficial influence of the waters in a great variety of cases; and have in my own person repeatedly experienced their efficacy in an eminent degree."

Aged persons; those whose constitution is naturally weak and delicate, or rendered so by disease; whose circulation is languid, joined with a peculiarity of nervous temperament, will very probably fail to experience, from the immersion in the Buxton bath, that comfortable and proper re-action which is so necessary to its beneficial effects. Such individuals may expect to derive more advantage from the baths of higher temperature at Bath; and still more, I must consider, from the sulphuretted baths of Aix la Chapelle, or Bad-Ems, or Wies-baden, the efficacy of which is wonderfully superior in those cases especially where an infirmity has taken possession of the limbs, from gout, rheumatism, or other causes, amounting to a degree of paralytic weakness.

Although I have not purposed in this volume to treat the subject of gout in the same analytical and detailed manner as I attempted in my Treatise, yet I think it incumbent upon me not to overlook the important subject of prophylactic or preventive treatment; and this is obviously more connected with the habits of living than with any other circumstances.

Baglivi observes with much truth, "Omnia remedia podagricis præscripta, inutilia prope modum erunt, nisi vinum, venus, otium, et crapula, temperantius usurpentur."

The particular plan of diet and regimen

which may promise the greatest advantage to a gouty patient must have reference to various circumstances—his age, the powers of his constitution, his accustomed habits of living, the force of the disease, its tendency to recurrence, and the most influential causes in producing such recurrence, and the actual state of the constitution. From this statement, it follows that each individual requires separate directions for his manner of living. Temperance is a relative term, and he who has been in the constant habit of committing all kinds of excess in diet, being restrained by his physician within the bounds of moderation, may still live in a manner which to another would be almost intemperance. Those who are yet young in years and constitution will admit of restrictions which would be found very unsuitable to those who are advanced in years; or who, from the wearing tyranny of the disease, are become prematurely old.

Selection in the articles of diet, and moderation in quantity, must be the peculiar care of the gouty patient, if he desire to counteract the returns of the disorder. As regards the quality, he must be mindful to avoid those materials which most tend to cause either acetous or putrefactive fermentation; also, on the other hand, those which are too nutritious. A dinner of turtle might be digested with perfect com-

fort; but it would be a deviation from the proper principle of diet, as tending to the formation of too much blood.

Until the constitution has become weakened, it usually happens that the stomach of a gouty patient is very competent to its office, and that the appetite is regularly active, rather than deficient. In fact, it is a very common case, that too much food is taken into the stomach, to admit of the subsequent process of digestion being perfectly performed; or, supposing that every stage of the digestive process is completed in a healthy manner, and that all the chyle is assimilated into good blood, a plethora gradually takes place, which introduces a fit of gout.

Indigestion in the stomach itself is readily distinguished by the patient, in the notable symptoms of acid or other eructations; the sensation called heart-burn; flatus; a sense of weight, or soreness, after a full meal: but the consideration of diet, as respects the plethoric state of constitution, belongs to the exercise of judgment and reflection, rather than to sensation.

Common prudence and immediate comfort would dictate to every one the necessity of avoiding any kind of food which experience had proved to be unsuitable. In principle, also, many articles of food should be avoided

by the gouty patient; and, as being unfavourable to immediate digestion, I may mention—salmon and stewed fish; pork food, unless care be taken to avoid the skin and fat; all meat which is not tender, but especially hard salted meats; pickles, unless occasionally and sparingly, and when they are well seasoned; salads, except now and then, and when the stomach is in the best state; for, besides that these latter articles are not convenient to a stomach liable to become disordered, they quicken the appetite too much for meat. Rich pastry, and most confectionary, should be avoided; although a plain pudding with any kind of good fruit, or the preparations of semolina, rice, or bread, and stewed fruit, are as proper for a gouty individual as any other.

Most persons commit still greater error in the quantity, than in the quality of their food; and, as respects the production of gout, it is eventually even more important. A fit of indigestion will often cure itself; but the gradual repletion of vessels which ensues from a full system of diet, with certainty leads to continued disease. Hence, it is of consequence to avoid heavy rich soups; and, as a general rule, I would advise the restriction to plain well-made gravy soup, and that sparingly. Oysters, when quite in season, and the beard part removed, are easily digested, as is proved by the

large repast which can be made on them without inconvenience; but they are too nutritive to be eaten freely, when it is an object to counteract plethora. This observation is applicable to the use of food of every kind, which contains a great deal of nourishment much condensed.

Simplicity of diet consists greatly in choosing what is most proper, and confining the meal to such judicious choice, instead of partaking of a great variety of dishes; but the temptations of a well-spread table demand the exercise of greater prudence than is usually practised.

It will be perhaps used as an argument, that the French make a practice of indulging in a much greater variety and quantity of animal food than the English, and that gout is not so prevalent among them as with us. This, however, is only a part of the argument. Their dishes are so much stewed, that they do not require much digestive power in the stomach, and the ingenuity of the cook in making a small quantity of meat serve to a great extent, in mixture with vegetables, oil, butter, spices, &c. is such, that, in point of actual nourishment, it contributes less than the English roast beef. Such food also passes off more readily; and this effect is favoured by the use of light wines, many of which are drunk with the addition of water.

The dinner table is soon quitted; and when we contrast this custom with the English one of a protracted dinner, consisting of a great variety of the most substantial dishes, with the heavy and strong liquors of porter or ale, and port and madeira in large quantity; with the additional effect of remaining without exercise, perhaps for several hours afterwards, need we wonder at the difference of result?

A good French cook, therefore, may probably present many dishes which suit a weak digestion better than our substantial English fare. Bad French cookery can only agree with those who are accustomed to it.

At the same time, however, that I am drawing the present comparison, I must give my unqualified praise, if not my preference, to good tender meat well dressed in the English style, with any wholesome vegetable in season well boiled; attention to proper mastication, and prudence in quantity, being taken into the account.

The gouty patient, sincerely resolved to use the best method of counteracting the returns of his disorder, will confine himself to the very careful use of good stomachic wine, matured by time; as sherry, madeira, or port; and those who find themselves heated by pure wine, should dilute it a little with water. Much drink at dinner time should certainly be avoided, and, in some cases of weakness of the muscular

powers of the stomach, great restriction in this particular should be observed; but I cannot agree with the extreme precept of the late Mr. Abernethey, a valuable authority I grant, who prohibited any drink during the meal. It is easy to point out the rule of doing what is safe and proper at the table; but the difficulty is, to be obeyed: and the physician is often called upon to pronounce how much error may be committed with the least probable impunity; rather than to lay down exact rules for the observance of what is right.

Confining myself at present to these observations, I shall proceed to make a few remarks on the preventive use of medicine.

In adverting to the theory of the disease which I have offered, the leading point of care will, obviously, be directed to the prevention of repletion in the vessels of the viscera contained within the abdomen. The patient can judge of this particular by watching the size of the whole abdomen. It almost invariably happens, that every protracted fit of gout is preceded by notable signs of fulness and increase of size in this part of the body; and, very commonly also, the patient has some warning feelings of general oppression of the system, arising from an overcharged state of the circulation.

In proportion as care and moderation in diet are observed, together with a due share of

regular exercise, the use of medicine is less required. Important to health as the regulation of the bowels is for all persons, it more particularly concerns the gouty patient. The natural action of the bowels, however regular, does not appear sufficient to oppose the accumulation of morbid secretions; and which, after a time, seem to concur with other circumstances in giving rise to a fit of the gout.

The two following kinds of pills may with propriety be placed in the hands of the patient, and he may alternate their use at his discretion, recollecting that those containing the scammony are the most active.

℞ Sodæ subcarbonat. exsiccat. ʒss.
Pilul. Aloës c. myrrh.
Extract. Rhei a. ℈ii.
Pulv. Zingiber. gr. xii.
Decoct. Aloës compos. q. s. Misce intimè et divide in pilulas xxiv, quarum capiat ii horâ somni pro re natâ.

℞ Pulv. Scammoniæ opt. gr. x ad xv.
Extract. Colocynth. Compos. ℈ii.
——— Rhei ʒss.
Sapon. dur. gr. x.
Ol. Carui, gutt. v. Misce intimè et divide in pilulas xx, quarum capiat i vel ii h. s. p. r. n.

At the same time that I suggest these compositions, as being found generally useful, I may observe that the patient will do well to adhere to any form of habitual or occasional

medicine which he may have found perfectly to agree with his particular constitution.

The *Chelsea pensioners'* medicine, so called, is found to agree with some persons remarkably well; and, as it may not be generally known, I shall state the formula.

"Take of flower of sulphur, two ounces.
"Cream of tartar, one ounce.
"Rhubarb powder, two drachms.
"Guaiacum, one drachm.
"Honey clarified, one pound.
"One nutmeg, finely powdered. Mix them intimately. Two large tea-spoonfuls to be taken night and morning, and to be persevered in till the whole is consumed."

This is the direction given with the medicine; but it may with propriety be taken in smaller quantity, and more occasionally.

Those who are accustomed to periodical returns of gout should be careful to mark all the circumstances, either general or local, which indicate the coming evil, and should accordingly have recourse to one or more active doses of medicine; as calomel in a moderate dose, or the pilula hydrargyri, either preparation being joined with the compound extract of colocynth, and the occasional addition of James's powder, to be taken at bed time, and followed by the compound senna draught in the morning.

In particular instances of the plethoric habit, a timely bleeding from the arm may be proper; or, cupping at the neck or behind the ears, should the head be affected with signs of congestion. A more than usual restraint and circumspection in diet should also be observed; and by such united care and attention the threatening paroxysm may perhaps be averted, and the general health be benefited.

I have already noticed the propriety of taking moderate doses of carbonate of soda, if there be signs of acidity in the stomach; and its use will be further indicated by the appearance of brick-dust sediment in the urine, rendered more efficacious in combination with carbonate of magnesia; but I object to the constant daily employment of alkalies, on the simple principle of preventing gout, for the reasons I have already stated.

In the instance of the increasing formation of chalk-stones (see p. 80), the administration of alkalies is called for equally as in the case of uric acid deposit in the urine; for I have ascertained, by repeated experiments, that the urine itself, in these cases, contains much less of uric acid than is natural to its constitution, and is often devoid of this principle: from whence I infer, that the extreme capillary vessels in the extremities, or elsewhere, separate the uric acid from the

blood, partly performing that office which, in the healthy constitution, belongs to the kidneys alone.

We meet with these concretions, composed almost wholly of super-urate of soda, in various parts of the body. I know one elderly gentleman who has them in almost every situation; for example, in the thighs, legs, and feet, the arms and hands, some parts of the trunk, the lobes of the ears, the tunica conjunctiva of the eye, and other parts.

A patient so afflicted should partake very sparingly of animal food, and should especially avoid rich and glutinous food. He will find his advantage in adopting, to the full extent that his constitution will conveniently allow it, a milk and vegetable diet.

In offering some observations on the general subject of regimen, I find it convenient to extract some passages from the article "on prophylactic regimen" contained in my large "Treatise on the Nature and Cure of Gout and Gravel, with general observations on the Morbid States of the Digestive Organs, and on Regimen."

In proportion as gout has taken its hold of the constitution, so will it be necessary for the patient to watch the leading errors of his health, and practise steadily all those habits which are most conducive to its preservation and improvement.

I know indeed no rule more important to be mentioned, than that the patient, who finds out by sad experience his weakest points of attack, and the peculiar influence of particular remote causes, should guard himself against them with a nurse's eye, and with corresponding care. Thus some, from exposure to wet and cold, incur either certain gout or rheumatism: while others, although very gouty subjects, can take such liberties with impunity. I have met with two gouty persons in particular, who can actually remain in wet clothes without any consequent injury: but if they commit any remarkable excess at the table, an attack of gout almost with certainty follows. Such extreme instances are rare: but there is good ground for the general assertion, that every gouty patient is rather more susceptible to some one remote cause than another: and although he cannot be too much a practical philosopher in his whole conduct, he should be scrupulously vigilant against the enemy in his most vulnerable quarter.

It is curious to consider how completely the constitution changes in its capability of resisting injury, in passing from youth to manhood. I have known several instances in which the invalid, now the subject of gout and rheumatism, traces back the period when he could bear any kind of exposure to wet and cold without any bad consequence, having, as a common practice, hurt-

ed streams, and remained a long time standing in water, when pursuing the amusement of fishing.

When the residence is a matter of convenient choice, a gravelly soil on a middling level, and protected from the north and the east wind, should be selected for the purpose. A situation which is damp and cold, or even damp and warm, is much to be condemned. For those who are not yet rendered delicate and enervated by the long influence of the disease, I would be disposed to prefer the bracing quality of a cold dry climate, to the relaxing powers of one that is hot. It must at the same time be stated, that those who are tender feel enjoyment only in summer months, and some even obtain exemption from their gout by removing to a hot climate. Van Swieten, Haller, and other authors, relate some instances of extraordinary cure produced by such emigration. I have met with some gouty persons, who found themselves free from disease during their residence in the East Indies, where business had taken them, although their habits were not more moderate than before. This seems to admit of explanation, from the profuse perspirations which regularly occur in such situations, and which obviously counteract the plethoric state of habit*. For this

* I do not find that gouty persons are particularly liable to deficiency of perspiration. The contrary indeed happens

reason chiefly, I presume it is, that the gout does not often make its first invasion in a hot climate, even with those who live freely. We also find that some robust persons of a sanguineous temperament, who are not subject to gout, in returning from a hot climate in which they enjoyed their health, to the variable one of this country, acquire an inflammatory disposition of vessels; and the explanation of the fact has already been offered.

Further, I may mention, that the benefit of equal temperature is for the most part sensibly felt by gouty persons. Thus I have known of some who have quitted this country for India, with a gouty and rheumatic state of pain and infirmity, afflicting them upon their embarkation and afterwards; but no sooner have they arrived in a warm latitude, than ease has returned; and gradually their natural recovery has taken place. I must, however, observe, that no climate nor place of residence can give protection against the effects of improper habits of living. I know some gentlemen who experienced their first attack of gout when in India, and many others who have continued to suffer from gout in a warm climate, havng freely yielded to the pleasures of the table.

with the majority, as they belong to the class of the *corpulent;* with whom, exercise produces a very free action of the skin.

When we consider that vicissitude of temperature, especially exposure to wet and cold, is a frequent exciting cause of gout, it is incumbent on us to consider the best means of lessening the susceptibility of the body to the impressions produced by such influence. During eight months in the year in this climate, the utility of wearing flannel next to the skin is too well known to require comment; and whether it should be discontinued in the warmer four months, must always be a matter of careful consideration. Even a leather waistcoat, over a thin one of flannel, is advisable in those instances, in which the susceptibility to the influence of damp and cold is so remarkable, that more or less of rheumatic or gouty sensation follows from every slight accidental exposure.

Some persons feel as much inconvenience from a very humid state of atmosphere, as if they got actually wet clothes. Every gouty patient should keep in mind, the infinite importance of preserving the feet *always* dry, and comfortably warm. I know many persons who state, that they are more apt to contract a fit of gout from getting wet feet, than from any other cause; but while this caution is observed, the debilitating influence of very warm stockings should be avoided. Upon the employment of cold sea bathing as a remedy to strengthen the

frame, I can only recommend a general rule of caution, it being always a questionable measure for a gouty subject; and the cold fresh water bath should be considered as almost inadmissible. Of the Buxton bath I have already spoken.

From ample experience, I can confidently advise, as equally safe and useful, the following daily practice, the exact method of which it may be useful that I should detail. Sponge every morning the whole of the feet, between the toes, all around the ankle joints (and the knee joints also, if they have been the seat of complaint), with salt water, or water in which salt is dissolved to the point of saturation*; care being taken, that the *chill* of the fluid be always just removed by the addition of a sufficient proportion of boiling or very hot water. It will allow of this dilution, and those, whose skin is easily irritated, will find it necessary to add an equal quantity of the simple hot water.

* The most convenient method which I can recommend, is, that a large covered vessel should be kept in the chamber, containing bay salt and water; and it is only necessary to notice, that the salt is always in excess; which may be concluded when any appears at the bottom undissolved. A gallon of cold soft water dissolves three pounds of salt. The patient should rest the foot on the shelf of the foot-tub, so that the used water passes as waste into the tub. A piece of smooth deal placed across any kind of foot-tub answers the purpose very well.

The skin being wiped perfectly dry, and then lightly dusted over with hair powder by means of a powder puff, diligent hand-rubbing should be employed for as long a time as is convenient; and should invariably be continued until a sensible glow of the skin is produced. In the whole process, one part should be finished before another is begun, lest evaporation should take place from the moistened surface in an unfavorable degree. In cold weather, it is right to use a warm towel for the purpose of wiping the skin dry. It will sometimes be objected that this daily attention is too troublesome and tedious, and that the benefit which it is likely to produce is not worth the purchase. Such observations rest on the same weak basis as those which apply to general care in regimen, and spring only from want of exertion and the misapplication of time. The comfort of this cleanly custom is very great, and the assistance which it affords to the weakened parts is very important. The numerous communications which I have received on this point are quite decisive in its favour. The subsequent friction* of the parts possesses the obvi-

* Sir William Temple, in speaking of the benefit of friction, strongly observes, "No man need have the gout who can keep a slave."

"Dessault cite un example connu à Bordeaux, d'un vieillard centenaire, qui trente ans avant sa mort, s'étoit garanti

ous advantages of increasing the superficial circulation, and exciting the absorption of such deposits as previous inflammation may have produced, either in the textures serving to motion, or in the cellular membrane. In proportion as the energy and strength of the limbs are preserved, the patient not only obtains the power of using regular exercise, but also fortifies the parts very usefully against future disease.

The powerful effect of *indolence*, in assisting the first invasion, and all the returns of gout, brings us to reflect on the great value of regular exercise among the remedies of prevention. It is the injudicious practice of some persons to mix indolence with exertion, by being inactive at home during the greater part of the week, and taking excessive exercise on occasional days. I know some gouty sportsmen who exemplify this statement very strongly, in performing even feats of riding at particular periods, but are sedentary in their general way of occupation. In this manner, a state of exhaustion rather than wholesome fatigue is produced; and when, by accidental excess in walking more particularly, the weakened joints are

et guéri de la goutte, à laquelle il étoit fort sujet auparavant, en se faisant brosser et frotter chaque jour, soir et matin, avec une maine garnie d'une mitaine de laine.—Barthez, tom. i. 194.

thus *over-exerted*, the intended benefit is sometimes converted into an exciting cause of a paroxysm.

Horse and foot exercise should each be used as answering different intentions. These means of health, so useful to all persons, are of particular importance to the gouty, with whom repletion is so great a part of their disease.

Sydenham expresses himself very forcibly in these words, after speaking of horse exercise: —"And, indeed, I have often thought if a person was possessed of as effectual a remedy as exercise is, in this and most *chronic* diseases, and had the art likewise of concealing it, he might easily raise a considerable fortune."

The shaking exercise of riding on horseback appears well calculated to quicken the mesenteric circulation; to increase the gravitation of the contents of the alimentary canal; and to urge the peristaltic motion.

Those persons, and especially the elderly, who have a weak and languid circulation in the extremities, should be attentive, when using horse exercise in the cold season of the year, to clothe their limbs with great care.

It certainly does happen that some individuals find horse exercise disagree, in producing unpleasant fatigue and lassitude; but it much more commonly happens, that it seems to contribute very essentially to health. I know some

gentlemen who chiefly succeed in averting the returns of gout by daily active horse exercise.

The additional advantages of walking exercise are made apparent, in the consequent improvement of strength and motion afforded to the lower limbs.

Such as are crippled, and disqualified from the modes of exercise already mentioned, should daily take an airing in a carriage; but it is only some real necessity of this kind*, or the obstacle of bad weather, that should give it more than occasional preference. Those who court indulgence must not expect exemption from the gout. Even the influence of bad habits of living is exceedingly counteracted by active exercise and labour. The gout very rarely visits the poor man's cottage.

Many examples might be quoted illustrating how effectually the predisposition to gout has been restrained, by taking a timely warning, and adopting an active course of life, with every observance of careful habits.

The superior advantage of the fresh air of the country over the confined atmosphere of the metropolis, is on all occasions sensibly felt

* On the useful influence of various modes of gestation, and the reasons for which carriage exercise is sometimes to be preferred, see Dr. Wollaston's interesting Essay, Phil. Trans. 1810, Part 1.

by the invalid; and is no less calculated to preserve than to restore health. The gouty citizens of London should be studious to unite daily exercise in the country with their less salutary pursuits in town.

The hours of rest and of rising deserve an attention of which the gouty class of society are too often unmindful; but their error consists commonly in taking too much repose rather than too little. Neither more nor less than eight hours in bed I should offer as the best general rule; and that the pillow should be sought before twelve, and quitted before eight.

In how great a degree health of mind belongs to health of body, I need not argue. The union of these blessings was the poet's warmest prayer:

"Orandum est, ut sit mens sano in corpore sano."

The physical rules of health have close alliance with the moral code; and serenity and cheerfulness come as uninvited guests, where health presides.

As far as concerns the intellectual faculties, it must be stated that very sedentary habits of application, and long-continued intense thinking, are highly unfavourable with relation to the gout. I am acquainted with a gouty gentleman, who was formerly a London accomptant; and he relates that his severest fits were always

induced by occasional excess of application to his business. Some who have retired from the occupations of the town to a country life have lost their gout with a total change of situation and habits; and all receive benefit from such a removal. The rational and active exercise of the faculties is as much to be recommended as that of the body; and the proper rule consists only in avoiding excess of study. Sydenham, in the prefatory epistle to his Treatise, declares, "that his immoderate application to his work occasioned the severest fit of gout which he ever had;" and apologizes for having confined himself at the time to the subjects of gout and dropsy; adding, "that the gout constantly returned as often as he attempted to go on with his work."

I shall now conclude my subject with observing, that, in regard to gout, the common principle holds good which applies to other diseases; namely, that the cardinal rules of preserving health are founded on temperance and exercise, on the prudent choice of those means which are found by the individual to suit and benefit his constitution, and the shunning of whatever tends in any way to injure and enfeeble it.

FINIS.

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